
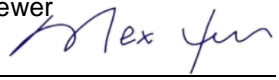


Prüfbericht Test report			Auftragsnr. / order no.: 244268555 Berichtsnr. / report no.: 60397048 001		
Auftraggeber client: NISKO GROUP LTD. 41 HAMAAYAN MODI'IN, Israel.			Auftragsdatum / date of order: 23.09.2020 AG-Referenz-Nr. / client reference no.: -		
Inhalt des Auftrags content of order:			Electrical and Photometric Measurement to LM-79-08		
Prüfgrundlagen test specifications:			IES LM-79-08		
Prüfgegenstand test item:			LED Street Light		
Bezeichnung identification:			EL-SL18LA-120W CLASS I T2S 3000K		
Eingang Prüfgegenstand receipt of test item:			23.09.2020		
Prüfgegenstands-Nr. test item no.:			A002073542-009		
Prüfzeitraum und -ort period of test and location:			23.09.2020-28.08.2020, Shanghai Xingshang Photoelectric technology Co., Ltd		
Prüflaboratorium testing laboratory:			TÜV Rheinland (Shanghai) Co., Ltd.		
Prüfergebnis test result *):			N/A		
Sonstiges / other aspects:			Tests at client's request and there is only test data available in this report and no further ratings for test result. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government..		
geprüft / tested by:			kontrolliert / reviewed by:		
06.11.2020 Fernando Dai /PE			06.11.2020 Alex Yan /Reviewer		
					
Datum Date	Name/Stellung Name/Position	Unterschrift Signature	Datum Date	Name/Stellung Name/Position	Unterschrift Signature
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. Dieser Prüfbericht wird neben der Dokumentation der Einzelergebnisse durch eine Bewertung des Produktes ergänzt. Diese Bewertung stützt sich nicht in jedem Fall auf ein durchgängiges Punkte- oder Bewertungssystem, wohl aber auf die Erfahrung der Experten des TÜV Rheinland. Die Bewertung ist keine rechtsverbindliche Interpretation der Mängelfreiheit eines Produktes.</p> <p>This test report relates to the a. m. test sample. Without permission of the testing laboratory this report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety or other mark on this product. Besides single test results this test report contains an assessment of the product. This assessment is not always based on a continuous rating system, but on experience of the experts of TÜV Rheinland Group. This assessment is not a legally binding interpretation of the flawlessness of the product.</p>					

General Remarks:

Factory: NINGBO SKYZON ENERGY CO., LTD
Address: No.19, Ke San Road, Ninghai 315600, Ningbo China

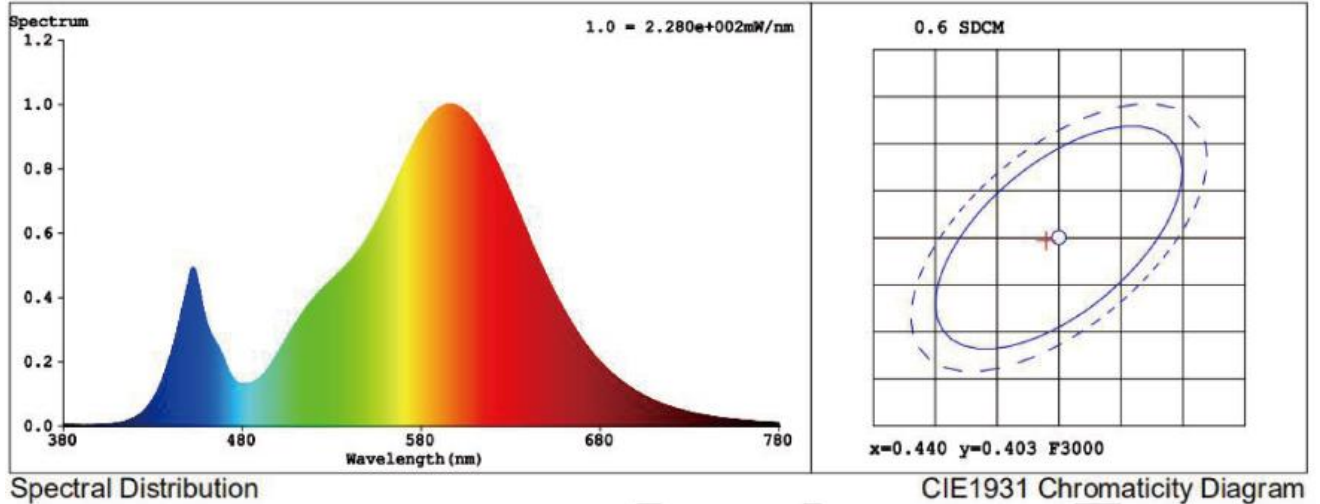
Product Information

Model name	Sample number	Rated voltage, frequency (V, Hz)	Nominal CCT (K)	Rated Wattage (W)	Type of LED Chip
EL-SL18LA-120W CLASS I T2S 3000K	A002073542-009	200-240Vac, 50/60Hz	3000K	120W	LUMILEDS LUXEON 5050- L1503070500600 000 14S2P 2MODULE

Test conditions:	
Number of hours operated prior to measurement	<u>0</u> hours
Total operating time of the product for measurements including stabilization	<u>2</u> hours and <u>30</u> minutes
Ambient	25 °C
Orientation	As normal use
Stabilization time	<u>90</u> minutes
Test method	Type C Gonio-photometer with moving mirror was used for photometric measurement (C- γ system)
Designation and type of reference standard lamp	For standard luminous flux lamp Current: 1.389A Reference luminous flux: 4310 lm Lamp type: Filament lamp Intensity distribution type: Omni-directional
	For standard luminous intensity lamp: Current: 9.6217A Reference luminous intensity: 571.9 cd Lamp type: Tungsten halogen lamp Intensity distribution type: Omni-directional
Correction factor applied	N/A
Photometric distance	3.0m for photometric measurement
	8.98m for luminous intensity measurement

Measured Results	
	EL-SL18LA-120W CLASS I T2S 3000K
Total luminous flux (lm)	17324
Input wattage (W)	119.84
Input current (A)	0.5533
Frequency (Hz)	50
Power factor	0.9849
Efficacy (Lm/W)	144.56
CCT (K)	2954
Chromaticity x	0.4390
Chromaticity y	0.4027
Chromaticity u'	0.2525
Chromaticity v'	0.5211
CRI	74
R9	0
Du'v' (Max.)	-0.000836
THDI(%)	5.103
LCS BUG Rating	B3-U0-G2, Full cut-off

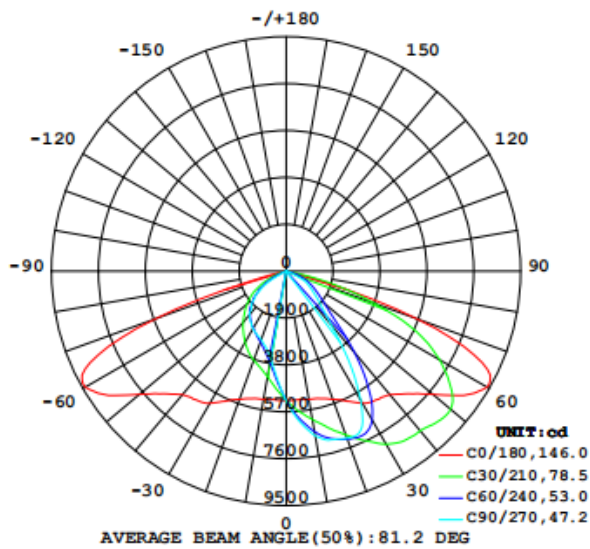
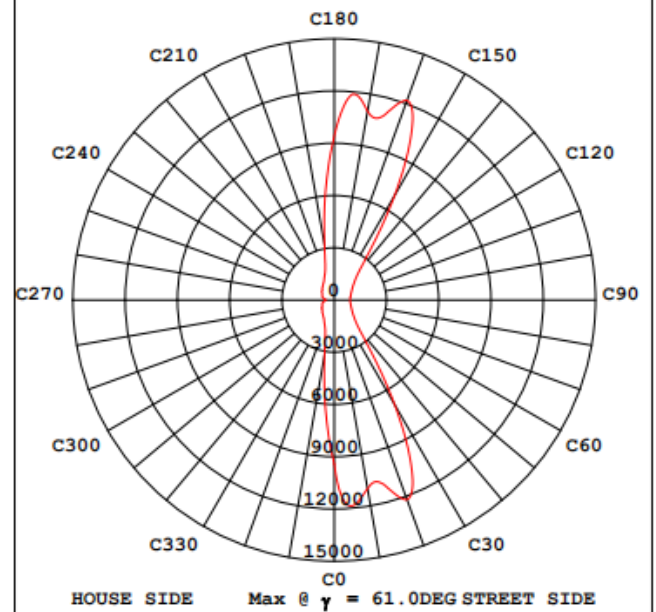
-The following in this page is blank-

Spectral power distribution: (Clause 10 of LM-79)
EL-SL18LA-120W CLASS I T2S 3000K

Dominant WL: 583.3nm
Peak WL: 598nm
Luminous Intensity Distribution, Ambient temperature: 25°C (Clause 10 of LM-79)

Description	Data
Model	EL-SL18LA-120W CLASS I T2S 3000K
Test voltage (V)	220VAC
Test current (A)	0.5533
Test wattage (W)	119.84
Frequency (Hz)	50
Power factor	0.9849
Central luminous intensity (cd)	5253
Max. luminous intensity(cd)	12200.87 (C=70,Gamma=61)

For the distribution curve see next page.
-The following in this page is blank-

DATA OF LAMP		PHOTOMETRIC DATA Eff: 144.56 lm/W			
MODEL	EL-SL18LA	I _{max} (cd)	12200.87	η street_up(%)	0.0
NOMINAL POWER(W)	120	LOR(%)	100.0	η street_down(%)	69.4
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	17324	η house_up(%)	0.0
NOMINAL FLUX(lm)	17323.9	MAXIMUM @ (C,γ)	70,61.0	η house_down(%)	30.6
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.05000
TEST VOLTAGE (V)	220	η down(%)	100.0	SLI	20.807

**INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS**

**MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM**


Zonal Lumen Summary and Percentages**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	1986.05	11.50	11.50
0-30	4445.91	25.70	25.70
0-40	7508.42	43.30	43.30
0-60	13888.84	80.20	80.20
0-80	17302.06	99.90	99.90
0-90	17323.88	100.00	100.00
10-90	16826.44	97.10	97.10
20-40	5522.36	31.90	31.90
20-50	8700.41	50.20	50.20
40-70	8996.3	51.90	51.90
60-80	3413.23	19.70	19.70
70-80	797.35	4.60	4.60
80-90	21.81	0.10	0.10
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	17323.88	100.00	100.00

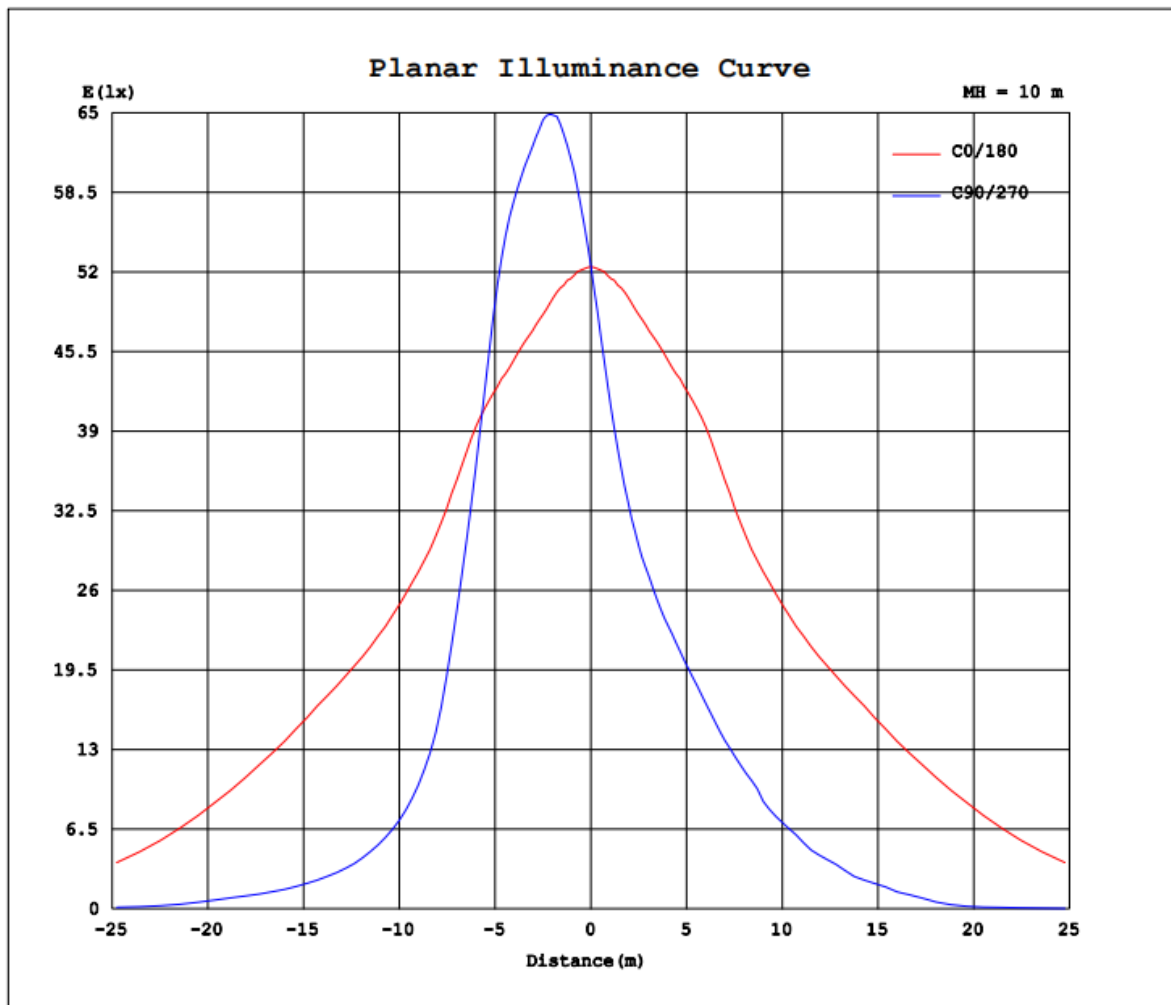
Total Luminaire Efficiency = 100.00%

Prüfbericht Nr. / Test report no. 60397048 001

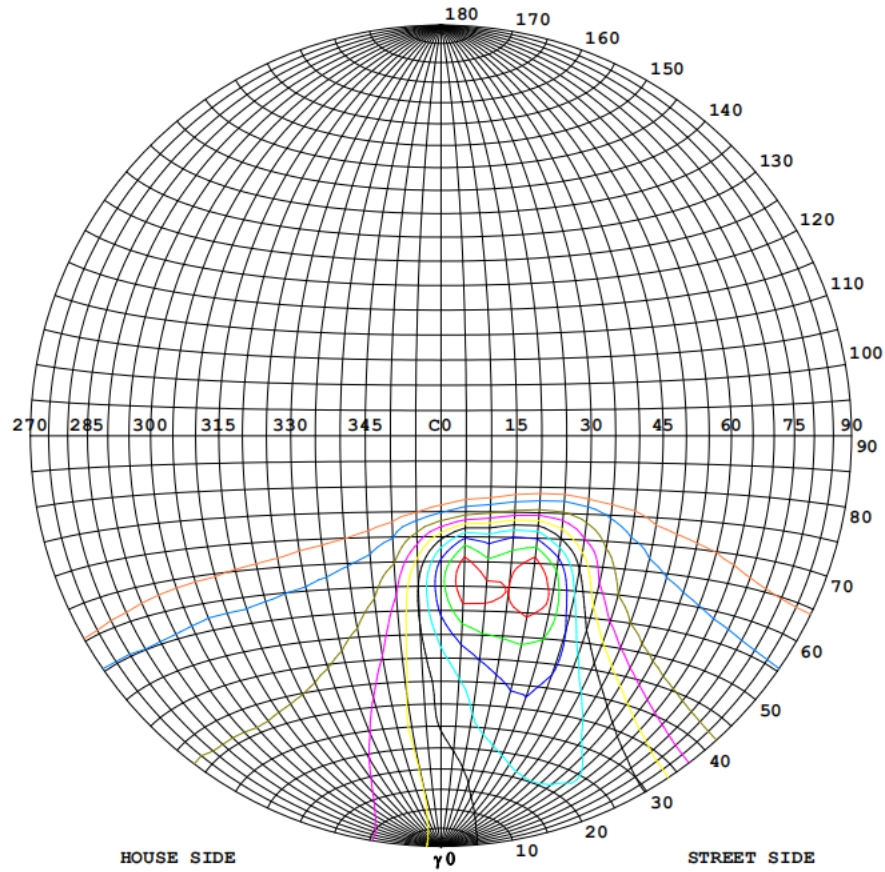
Luminous Intensity Distribution Data

Total View EL-SL18LA 120W CLASS I T2S 3000K/MS																																
Keywords					Candela										2D					3D												
Vertical Axis	Horizontal Axes										Multiplier=1	Max Cd																				
	0	5	10	15	20	25	30	35	40	45			50	55	60	65	70	75	80	85	90	95	100	105								
45	2043.08	2059.99	2103.66	2174.16	2304.48	2497.35	2786.81	3380.20	4245.16	5267.69	6455.84	7681.77	8640.28	9130.83	9241.42	9037.24	8593.98	7977.75	7021.85	5787.96	4636.99	3722.64										
46	1936.23	1948.59	1994.53	2060.41	2167.33	2336.17	2685.96	3075.22	3913.05	4970.21	6200.96	7552.95	8677.65	9239.53	9393.61	9181.25	8778.94	8164.14	7150.06	5824.52	4588.24	3647.77										
47	1840.58	1849.44	1890.21	1950.28	2051.65	2200.66	2612.39	2867.42	3582.77	4673.16	5862.74	7414.66	8705.68	9370.20	9541.79	9357.37	9015.78	8343.69	7270.16	5864.73	4537.37	3554.89										
48	1746.75	1751.13	1790.86	1851.10	1946.72	2078.70	2265.98	2601.09	3256.72	4353.36	5663.48	7210.08	8719.20	9527.82	9703.97	9525.67	9151.62	8568.77	7439.32	5903.22	4493.30	3472.77										
49	1657.18	1663.52	1705.20	1759.09	1845.80	1969.08	2144.36	2423.52	2974.36	4045.66	5362.21	6987.66	8723.34	9658.40	9865.61	9683.60	9409.08	8810.95	7584.63	5939.59	4441.14	3385.49										
50	1570.05	1583.81	1623.62	1666.24	1745.78	1848.76	1869.52	2029.00	2273.23	2729.97	3715.21	5082.53	6751.93	8691.33	9808.33	10022.39	9848.57	9683.19	9104.26	7759.85	5978.96	4386.51	3285.81									
51	1485.76	1502.36	1536.97	1586.43	1659.69	1772.15	1921.43	2145.49	2530.66	3390.57	4489.45	6499.78	8643.24	9942.67	10247.25	10039.32	9934.00	9389.90	7956.22	6031.94	4333.19	3188.06										
52	1422.86	1437.89	1463.04	1515.36	1581.28	1685.08	1825.77	2026.47	2362.72	3102.52	4089.61	6245.39	8564.54	10129.63	10450.70	10210.66	10160.04	9688.02	8158.27	6056.93	4252.95	3084.12										
53	1360.34	1373.67	1398.63	1445.73	1511.03	1602.70	1731.74	1928.45	2232.98	2839.34	3717.41	5988.21	8442.58	10318.97	10706.19	10368.99	10369.49	9990.64	8355.08	6106.80	4195.00	2978.21										
54	1307.45	1309.45	1334.38	1380.15	1453.94	1523.12	1645.17	1820.01	2112.80	2612.30	3877.07	5749.39	8304.12	10485.89	10967.75	10515.07	10563.47	10297.00	8658.10	6142.01	4121.37	2874.62										
55	1244.67	1254.32	1277.34	1314.69	1377.00	1450.88	1572.30	1734.51	1994.56	2440.12	3567.35	5492.33	8121.07	10651.15	11174.73	10652.75	10748.24	10602.45	8780.58	6149.97	4019.95	2758.06										
56	1189.17	1199.39	1222.63	1257.82	1317.00	1385.45	1496.72	1651.61	1892.59	2298.72	3268.49	5221.61	7945.13	10747.24	11389.64	10783.17	10908.45	10872.42	8924.77	6182.76	3920.64	2641.45										
57	1130.39	1142.52	1162.00	1201.43	1257.02	1320.11	1425.04	1576.96	1793.13	2170.17	3006.07	4955.22	7777.34	10814.67	11658.16	10873.56	11031.26	11131.10	9083.75	6195.04	3808.35	2520.14										
58	1068.81	1077.06	1104.52	1144.80	1200.69	1259.63	1357.73	1505.36	1699.80	2050.40	2779.81	4665.07	7571.77	10814.15	11859.66	10940.89	11080.39	11361.17	9184.69	6195.30	3683.16	2401.36										
59	1020.53	1021.57	1043.10	1088.42	1146.00	1220.55	1295.76	1432.19	1613.88	1937.89	2593.31	4377.22	7376.29	10764.98	12025.33	10966.32	11094.75	11570.79	9302.44	6168.10	3555.59	2273.81										
60	964.84	969.14	991.79	1031.34	1081.29	1145.81	1236.77	1360.87	1557.85	1831.42	2439.43	4108.96	7179.04	10664.49	12102.32	10957.19	11117.83	11741.43	9395.10	6104.74	3406.63	2137.37										
61	915.26	918.16	943.09	983.66	1024.29	1088.28	1177.39	1291.93	1463.45	1762.61	2317.21	3852.93	6931.94	10439.25	12200.87	10963.24	11086.43	11856.32	9407.41	6100.80	3256.20	2015.70										
62	865.03	865.58	891.89	935.92	972.84	1030.19	1118.14	1239.92	1379.88	1655.64	2200.83	3627.36	6698.20	10281.34	12186.96	10889.21	10963.71	11833.54	9359.41	5899.47	3068.69	1885.88										
63	772.28	781.85	825.45	875.91	921.34	977.24	1056.08	1168.24	1311.26	1571.03	2084.89	3430.69	6450.80	10002.40	12084.54	10824.49	10959.65	11780.97	9276.24	5695.94	2829.46	1762.99										
64	640.42	652.30	711.06	785.92	859.21	924.30	1000.62	1108.92	1239.97	1487.30	1980.87	3235.70	6137.63	9637.62	11834.51	10664.77	10365.82	11060.63	9059.86	5470.30	2590.23	1616.94										
65	499.76	515.76	576.72	673.49	768.92	856.32	944.92	1045.59	1176.11	1406.36	1876.30	3081.65	5848.42	8231.38	11483.34	10414.86	10021.45	11354.32	8752.26	5162.26	2550.16	1443.41										
66	372.43	387.47	442.45	555.75	673.76	767.24	870.88	983.53	1113.48	1328.69	1787.30	2909.14	5478.75	9273.78	11082.05	10166.79	9601.46	10979.29	8314.45	4765.40	2075.55	1298.13										
67	284.99	292.27	333.84	434.98	579.63	692.07	782.45	907.18	1047.83	1249.09	1681.36	2760.12	5119.25	8415.45	10546.61	9897.64	9835.01	10515.73	7813.96	3433.33	1819.92	1167.05										
68	247.87	250.54	267.08	328.76	472.37	626.24	707.53	808.04	967.72	1173.80	1590.28	2573.46	4689.17	7516.15	9897.157	9551.93	9213.32	9968.17	7183.35	3668.06	1598.91	1027.78										
69	226.15	229.68	238.06	262.32	372.11	546.61	654.64	722.73	865.64	1100.28	1485.24	2346.84	4217.98	6814.67	9200.28	9154.58	9227.35	9224.92	6474.74	3291.97	1383.97	903.57										
70	210.05	212.54	218.16	228.85	292.45	461.01	601.85	666.78	760.40	1008.71	1369.23	2131.66	3773.58	6176.66	8464.28	8567.97	8785.55	8313.87	5611.21	2875.12	1152.06	772.02										
71	195.33	196.70	200.58	207.74	237.08	378.59	539.61	613.83	695.04	883.94	1222.43	1922.92	3362.76	5548.06	7659.43	7698.04	6958.06	7161.21	4707.19	2358.09	977.55	644.26										
72	180.67	181.67	185.17	189.34	204.47	305.79	470.55	558.37	625.54	754.04	1087.15	1727.06	2970.08	4548.06	6636.69	6740.91	5983.98	5882.68	3658.04	1821.81	721.24	529.49										
73	167.65	168.93	170.81	173.80	183.09	245.26	400.25	500.19	562.03	695.91	937.02	1508.98	2579.79	4082.23	5443.00	5461.03	4625.90	4239.98	2615.10	1305.94	611.57	427.59										
74	155.88	157.19	158.54	159.98	165.41	203.68	338.64	446.59	487.07	581.66	815.43	1297.25	2198.75	3385.08	4219.77	4157.58	3941.31	2804.12	1657.27	879.35	461.67	342.38										
75	145.03	145.54	146.36	147.37	150.34	171.97	280.51	387.93	423.24	516.34	712.69	1081.58	1802.47	2613.57	3089.92	2822.21	2176.88	1725.96	1125.51	569.06	342.7	268.79										
76	132.57	133.85	134.76	133.97	138.39	149.30	225.29	305.45	368.06	448.98	613.36	969.32	1382.34	1918.90	2600.10	1720.95	1415.83	1238.30	718.39	361.48	259.73	208.56										
77	120.35	121.09	122.24	121.22	121.00	130.08	187.15	260.07	294.79	380.97	491.16	611.15	976.54	1371.08	1369.78	1247.02	969.60	769.04	274.12	247.35	184.72	161.60										

Tool_View EL-S1814 120W CLASS I TZS 3000KIES																												
Keywords					Candela										2D					3D								
Vertical Angles		Horizontal Angles			Multiplier=1		Max Cd																					
	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300	305	310	315	320	325	330	335	↗					
45	2180.58	2260.49	2384.22	2612.97	3046.44	3722.64	4636.99	5787.96	7021.85	7977.75	8593.98	9037.24	9241.42	9103.89	8640.28	7681.77	6455.84	5267.69	4245.16	3380.20	2786.81	2497.35						
60	2311.29	2202.03	2322.02	2542.87	2967.17	3647.77	4588.24	5821.52	7150.06	8164.14	8778.94	9181.25	9393.63	9239.53	8677.65	7552.56	6200.99	4970.21	3913.05	3075.22	2595.96	2336.17						
75	2081.44	2144.03	2266.62	2471.76	2881.96	3554.89	4537.37	5864.73	7270.16	8349.69	9015.78	9367.37	9541.79	9370.20	8705.68	7414.66	5942.96	4673.16	3582.77	2817.42	2412.39	2200.66						
90	2030.28	2090.36	2204.11	2397.26	2791.48	3472.77	4499.30	5903.02	7439.32	8568.77	9191.62	9525.67	9703.07	9527.82	8719.20	7210.08	5663.48	4359.36	3256.72	2606.09	2265.98	2078.70						
105	1923.94	2037.81	2135.20	2318.17	2702.97	3385.49	4445.14	5939.59	7584.63	8810.95	9469.08	9683.60	9869.61	9658.40	8723.34	6987.66	5362.21	4045.66	2974.36	2423.52	2144.36	1969.08						
120	1970.64	1975.87	2063.03	2239.97	2615.99	3205.81	4386.51	5938.94	7589.05	9104.26	9603.19	9848.57	10022.39	9802.93	8691.33	6751.93	5082.53	3715.21	2729.97	2273.23	2029.00	1869.52						
135	1857.45	1915.05	1997.66	2162.65	2523.29	3188.06	4333.19	6031.94	7596.22	9389.90	10934.00	10039.32	10247.25	9942.67	8643.24	6499.78	4784.45	3390.57	2530.66	2146.49	1921.43	1772.15						
150	1772.37	1847.09	1930.61	2084.74	2420.99	3084.12	4252.95	6056.93	8158.27	9688.02	10160.10	10210.66	10450.70	10129.69	8564.54	6245.39	4489.61	3102.52	2366.72	2025.77	1825.77	1685.08						
165	1677.92	1782.48	1857.93	2003.20	2326.71	2978.21	4195.00	6146.08	8395.08	9990.64	10669.49	10368.99	10706.19	10318.97	8442.58	5988.21	4171.71	2839.34	2232.98	1928.45	1731.74	1602.70						
180	1578.43	1710.01	1790.01	1929.11	2228.61	2874.62	4121.37	6102.01	8568.10	10297.00	10363.47	10515.07	10667.75	10485.89	8304.12	5743.39	3877.07	2612.30	2112.80	1822.01	1645.17	1523.12						
195	1504.96	1616.81	1719.42	1854.21	2132.49	2758.06	4014.95	6149.97	8780.58	10602.45	10744.26	10652.75	11147.73	10651.15	8121.07	5492.33	3567.35	2440.12	1994.56	1734.51	1572.30	1450.88						
210	1440.96	1516.34	1650.30	1775.84	2004.76	2641.45	3920.64	6182.76	8924.77	10872.42	10908.45	10783.17	11389.64	10747.24	8245.03	5221.61	3268.49	2288.12	1892.59	1651.81	1496.72	1305.45						
225	1372.82	1420.19	1576.32	1699.30	1948.19	2520.14	3808.35	6199.04	9083.75	11131.10	11031.29	10873.55	11658.16	10814.67	7777.34	4955.22	3006.07	2170.17	1793.13	1576.96	1425.04	1320.11						
240	1301.04	1350.70	1477.89	1616.97	1861.08	2401.36	3683.16	6195.30	9184.69	11361.17	11080.38	10940.89	11859.66	10814.15	7571.77	4685.07	2779.81	2050.40	1699.80	1505.35	1357.73	1259.69						
255	1188.96	1280.58	1372.72	1537.33	1772.13	2273.81	3555.59	6168.10	9302.44	11570.79	11094.75	10966.32	12025.33	10764.98	7376.29	4377.22	2593.31	1937.89	1613.88	1432.19	1295.76	1200.55						
270	1094.78	1206.69	1281.13	1452.40	1682.68	2137.33	3406.63	6104.74	9395.10	11741.43	11117.83	10957.19	12102.32	10654.49	7173.04	4108.96	2439.43	1831.42	1537.85	1360.88	1236.77	1145.81						
285	1029.73	1126.52	1206.76	1369.97	1585.95	2015.70	3256.20	6108.00	9407.41	11856.32	11008.43	10963.24	12200.87	10493.25	6931.94	3852.93	2317.21	1742.61	1463.45	1291.93	1137.99	1088.28						
300	949.38	1012.32	1131.79	1270.43	1492.57	1885.68	3068.69	5899.47	9359.41	11833.54	10863.71	10889.21	12186.96	10281.34	6698.20	3627.36	2200.83	1656.84	1379.68	1227.06	1118.14	1030.19						
315	875.82	924.05	1047.06	1159.20	1384.94	1762.99	2823.46	5695.46	9276.24	11780.97	10659.65	10824.49	12084.54	10200.40	6450.80	3430.69	2080.89	1571.03	1311.26	1128.24	1058.08	977.24						
330	761.02	856.85	949.95	1057.59	1271.59	1616.94	2590.23	5470.30	9059.86	11600.63	10350.62	10684.77	11834.51	9667.32	6137.63	3235.70	1980.87	1328.97	1239.97	1104.52	1000.62	924.30						
345	678.77	784.27	840.07	956.58	1141.54	1443.41	2350.16	5126.62	8752.26	11354.32	10101.45	10414.86	11483.34	9231.38	5848.42	3081.65	1876.32	1406.36	1176.11	1045.99	944.32	856.32						
360	611.19	689.61	757.28	866.105	1071.29	1298.13	2075.55	4765.40	8314.45	10979.29	9621.06	10166.79	11082.05	8733.78	5478.75	2909.14	1787.32	1329.63	1113.48	983.53	870.88	767.24						
375	547.95	586.68	675.79	773.57	889.64	1167.05	1819.32	4343.33	7183.96	10517.53	9215.01	9897.64	10546.61	8144.45	5119.25	2760.12	1681.36	1249.09	1047.83	907.18	782.45	692.07						
390	459.03	528.01	601.33	688.81	792.74	1027.78	1598.91	3868.06	7183.35	9968.17	8833.32	9557.93	9897.17	7516.15	4687.17	2573.76	1590.08	1173.80	967.72	808.07	703.57	626.24						
405	409.85	459.51	508.63	593.24	698.39	903.57	1383.97	3391.97	6474.74	9224.32	8727.35	9154.58	9200.28	6814.67	4291.98	2346.84	1485.64	1170.28	865.64	722.73	654.64	546.61						
420	354.12	381.69	430.74	509.57	599.74	772.02	1152.06	2875.12	5611.21	8313.87	7785.55	8577.97	8464.28	6176.60	3773.58	2131.66	1369.23	1008.71	760.40	666.18	601.85	461.01						
435	274.86	322.66	369.56	438.17	506.70	644.26	972.55	2358.09	4709.17	7161.21	6958.06	7858.04	7659.43	5548.00	3362.76	1922.92	1227.43	883.94	685.04	613.83	539.61	378.59						
450	232.75	279.01	309.49	356.05	418.90	529.49	771.24	1821.81	3658.04	5782.88	5883.98	6740.91	6636.69	4854.06	2570.08	1727.06	1082.15	754.04	626.53	598.37	470.55	305.79						
465	194.28	219.51	253.90	294.23	347.46	429.59	611.57	1305.94	2615.10	4239.98	4625.90	5461.043	5443.00	4098.23	2397.79	1508.98	937.02	695.91	562.03	500.19	420.55	245.26						
480	163.99	187.23	211.23	242.79	289.73	342.38	457.61	879.35	1657.27	2804.12	3141.91	4157.58	4219.77	3365.08	1906.75	1297.25	815.43	581.66	487.07	446.59	380.54	203.68						
495	145.30	156.21	161.09	190.87	231.76	268.79	347.32	568.93	1125.51	1725.96	2376.18	2822.21	3089.92	2613.57	1802.47	1081.58	712.69	516.34	423.24	387.93	238.61	171.97						
510	129.16	135.17	126.24	151.27	185.82	208.56	259.73	361.48	718.39	1239.30	1419.03	1720.55	2020.00	1918.90	1382.34	869.32	613.36	448.98	368.06	305.45	225.29	148.90						
525	114.22	115.69	96.18	106.27	137.51	151.80	199.73	246.37	346.17	769.04	949.03	1347.93	1369.76	1312.95	976.45	611.14	401.16	380.97	294.79	260.07	187.15	130.34						



STREETLIGHT ISOCANDELA DIAGRAM

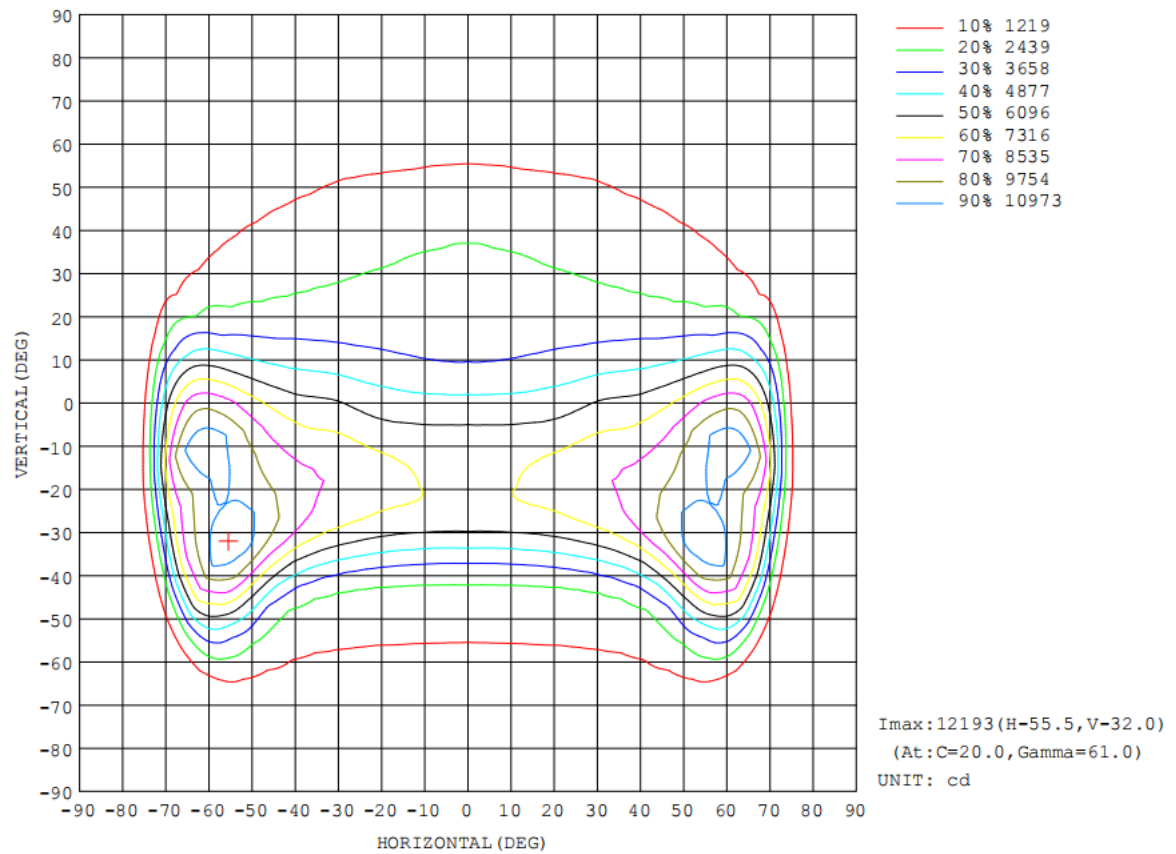


Classification:

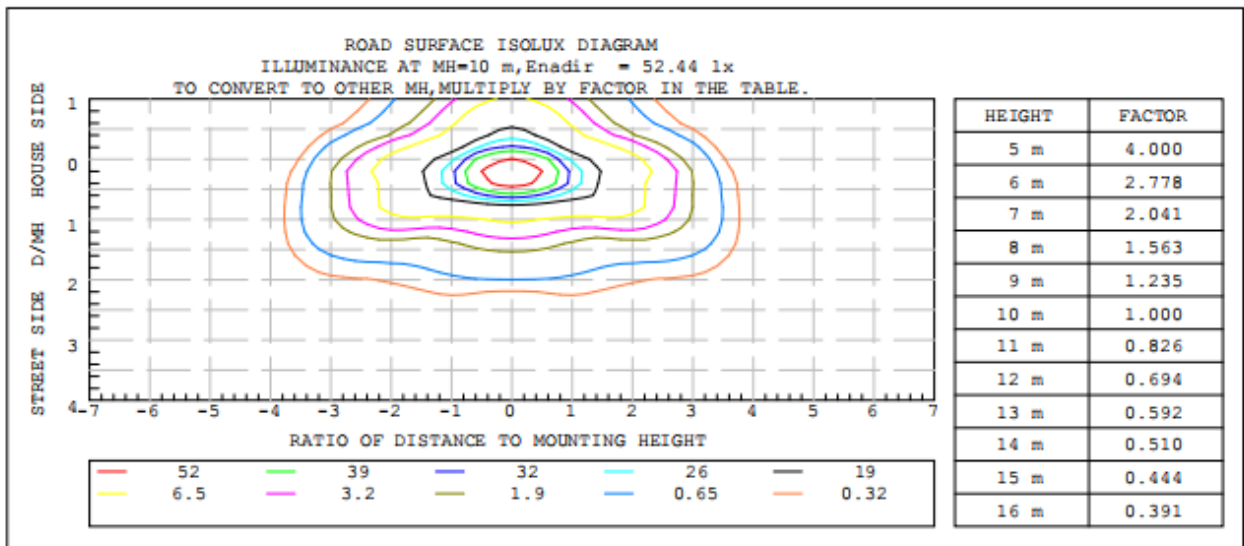
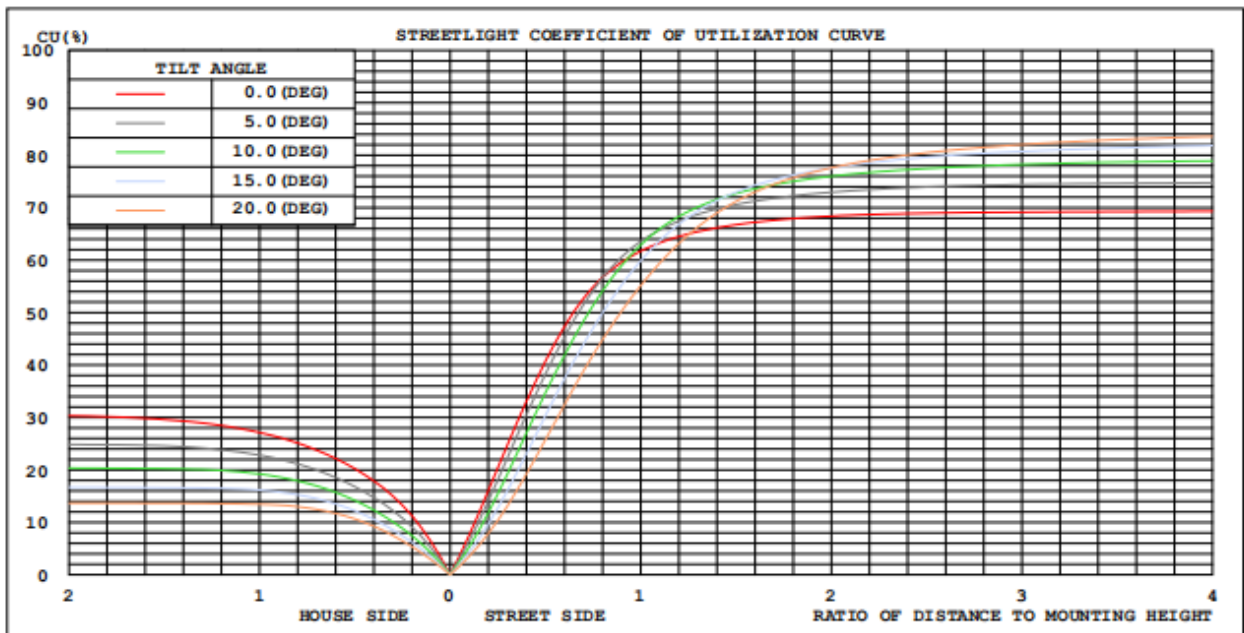
IES: Type II - Short
CIE: Narrow - Intermediate
IES: Full cut-off
CIE: Full cut-off
Max. At 80: 18.45cd/klm
Max. At 90: 0cd/klm
Max. 80-90: 18.45cd/klm

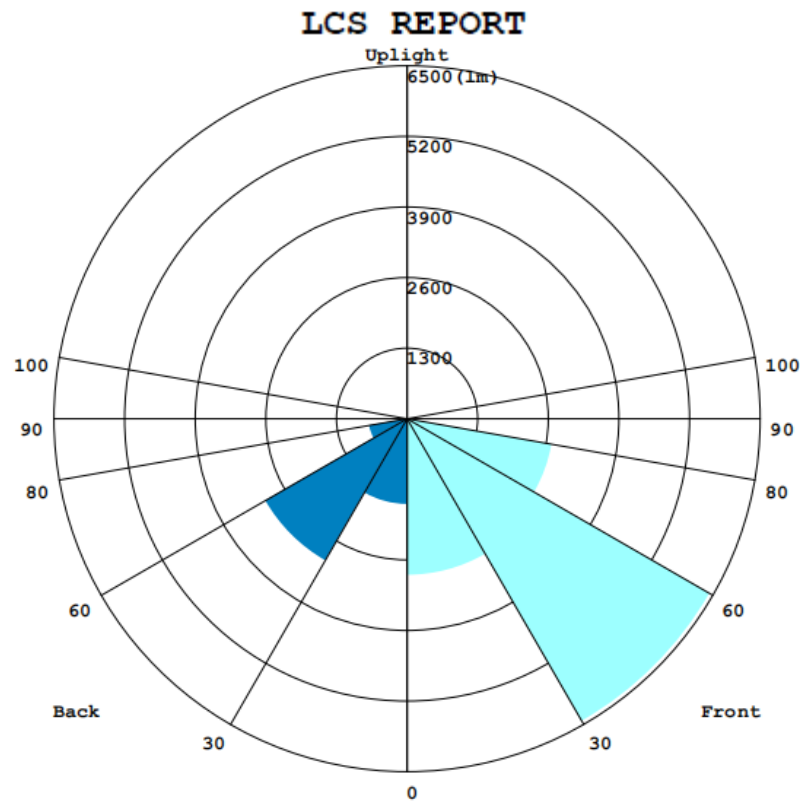
ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	12201
90%	10981
80%	9761
70%	8541
60%	7321
50%	6100
40%	4880
30%	3660
20%	2440
10%	1220
5%	610

ISOCANDELA DIAGRAM



COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM




IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	2875.4	16.6
FM - Front-Medium(30-60)	6428.3	37.1
FH - Front-High(60-80)	2702.8	15.6
FVH - Front-Very High(80-90)	17.39	0.1
Total Forward Light	12024	69.4

BL - Back-Low(0-30)	1570.5	9.1
BM - Back-Medium(30-60)	3014.7	17.4
BH - Back-High(60-80)	710.4	4.1
BVH - Back-Very High(80-90)	4.4228	0.0
Total Back Light	5300	30.6

UL - Uplight-Low(90-100)	0	0.0
UH - Uplight-High(100-180)	0	0.0
Total Up Light	0	0.0

BUG(Back,Up,Glare) Rating	B3-U0-G2
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	5300	0	5300
Street Side	12024	0	12024

Photo



overview



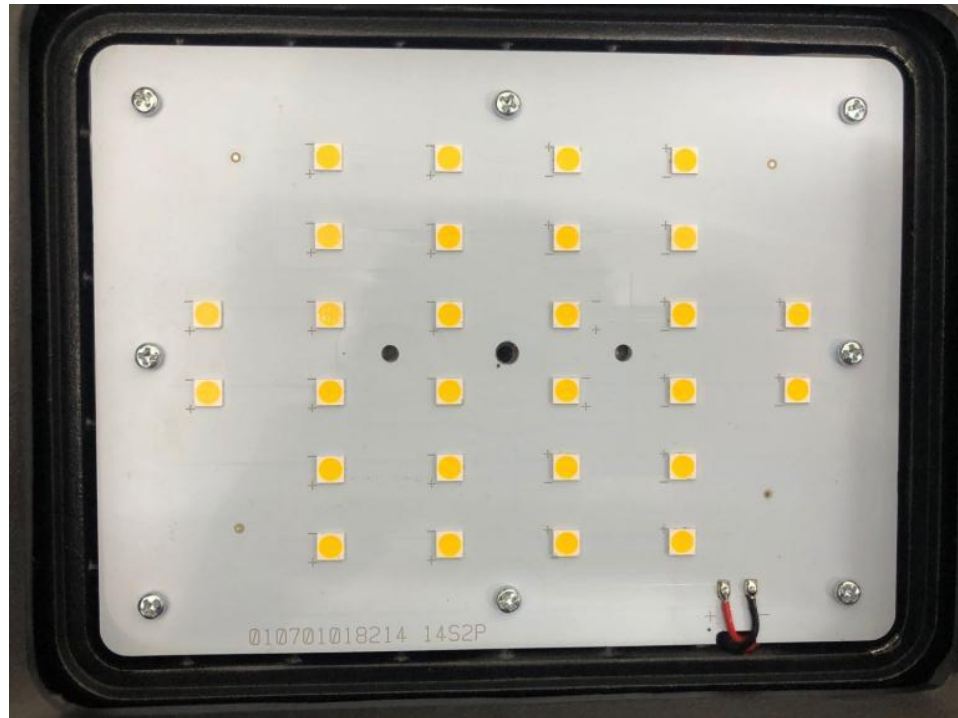
Back-side



LED Driver + SPD



Optical lens



LED module

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 201063-0

TUV Rheinland (Shanghai) Co., Ltd
Jing'An District, Shanghai
China

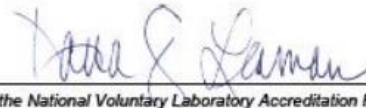
*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Energy Efficient Lighting Products

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2020-06-09 through 2021-06-30
Effective Dates




For the National Voluntary Laboratory Accreditation Program