

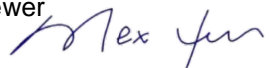


Prüfbericht <i>Test report</i>		Auftragsnr. / order no.: 244268555 Berichtsnr. / report no.: 60397062 001	
Auftraggeber <i>client:</i>		Auftragsdatum / <i>date of order:</i>	
NISKO GROUP LTD. 41 HAMAAYAN MODI'IN, Israel.		23.09.2020 AG-Referenz-Nr. / <i>client reference no.:</i> -	
Inhalt des Auftrags <i>content of order:</i> Electrical and Photometric Measurement to LM-79-08			
Prüfgrundlagen <i>test specifications:</i> IES LM-79-08			
Prüfgegenstand <i>test item:</i> LED Street Light		EAN-Nr. / no.: N/A	
Bezeichnung <i>identification:</i> EL-SL18LA-120W CLASS I T2STF 4000K			
Eingang Prüfgegenstand <i>receipt of test item:</i> 23.09.2020			
Prüfgegenstands-Nr. <i>test item no.:</i> A002073542-014			
Prüfzeitraum und -ort <i>period of test and location:</i> 23.09.2020-28.08.2020, Shanghai Xingshang Photoelectric technology Co., Ltd			
Prüflaboratorium <i>testing laboratory:</i> TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis <i>test result *):</i>		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 Name/Stellung Unterschrift Date Name/Position Signature		 Datum Name/Stellung Unterschrift Date Name/Position Signature	
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General Remarks:

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

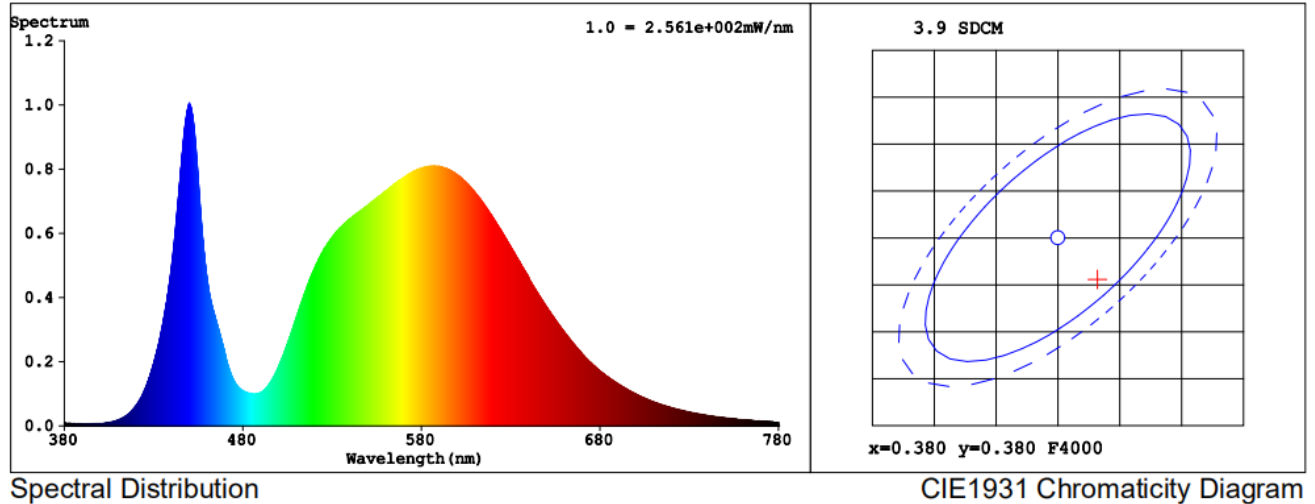
Product Information

Model name	Sample number	Rated voltage, frequency (V, Hz)	Nominal CCT (K)	Rated Wattage (W)	Type of LED Chip
EL-SL18LA-120W CLASS I T2STF 4000K	A002073542-014	200-240Vac, 50/60Hz	4000K	120W	LUMILEDS LUXEON 5050- L15040705006000 00 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 T2STF 4000K
Total luminous flux (lm)	17909
Input wattage (W)	120.19
Input current (A)	0.5540
Frequency (Hz)	50
Power factor	0.9865
Efficacy (Lm/W)	149.01
CCT (K)	3916
Chromaticity x	0.3832
Chromaticity y	0.3755
Chromaticity u'	0.2274
Chromaticity v'	0.5015
CRI	73.7
R9	0
Du'v' (Max.)	-0.00136
THDI(%)	4.013
LCS BUG Rating	B3-U0-G2, Full cut-off

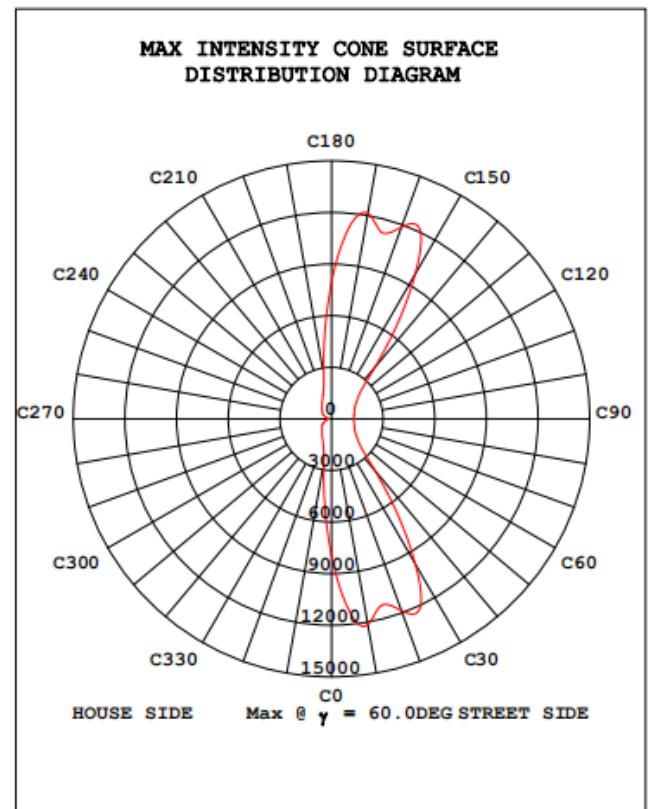
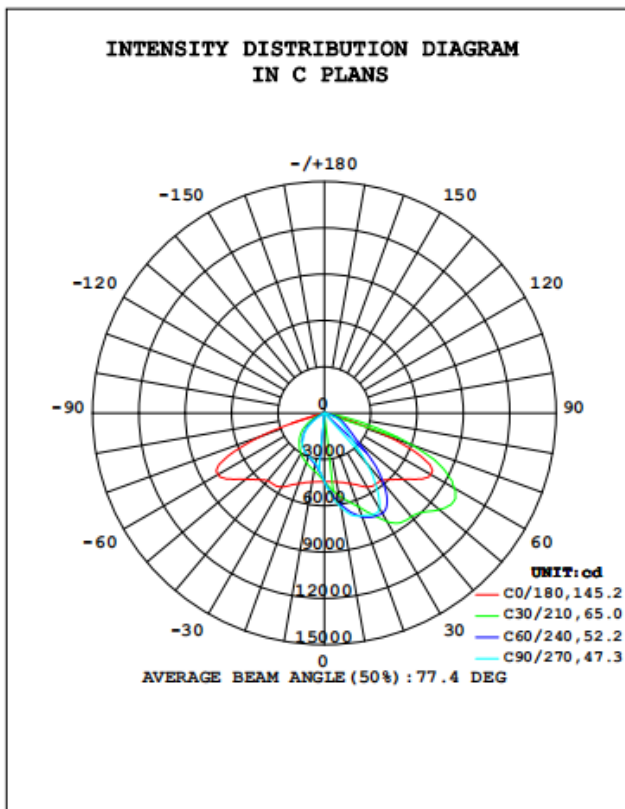
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Spectral power distribution: (Clause 10 of LM-79)
EL-SL18LA-120W CLASS I T2STF 4000K

Dominant WL: 580.1nm
Peak WL: 450nm
Luminous Intensity Distribution, Ambient temperature: 25°C (Clause 10 of LM-79)

Description	Data
Model	EL-SL18LA-120W CLASS I T2STF 4000K
Test voltage (V)	220VAC
Test current (A)	0.5540
Test wattage (W)	120.19
Frequency (Hz)	50
Power factor	0.9865
Central luminous intensity (cd)	4423
Max. luminous intensity(cd)	12161.62 (C=65, Gamma=60)

For the distribution curve see next page.
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DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.01 lm/W			
MODEL	EL-SL18LA	I _{max} (cd)	12161.62	η street_up (%)	0.0
NOMINAL POWER (W)	120	LOR (%)	100.0	η street_down (%)	74.1
RATED VOLTAGE (V)	220-240	TOTAL FLUX (lm)	17909	η house_up (%)	0.0
NOMINAL FLUX (lm)	17909.2	MAXIMUM @ (C, γ)	65, 60.0	η house_down (%)	25.9
LAMPS INSIDE	1	η up (%)	0.0	76 FLASHAREA (m2)	0.05000
TEST VOLTAGE (V)	220	η down (%)	100.0	SLI	21.005



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

Zone	Lumens	%Lamp	%Fixt
0-20	1806.54	10.10	10.10
0-30	4200.06	23.50	23.50
0-40	7396.74	41.30	41.30
0-60	14076.65	78.60	78.60
0-80	17851.27	99.70	99.70
0-90	17909.16	100.00	100.00
10-90	17475.21	97.60	97.60
20-40	5590.19	31.20	31.20
20-50	8948.76	50.00	50.00
40-70	9465.21	52.90	52.90
60-80	3774.63	21.10	21.10
70-80	989.32	5.50	5.50
80-90	57.89	0.30	0.30
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	17909.16	100.00	100.00

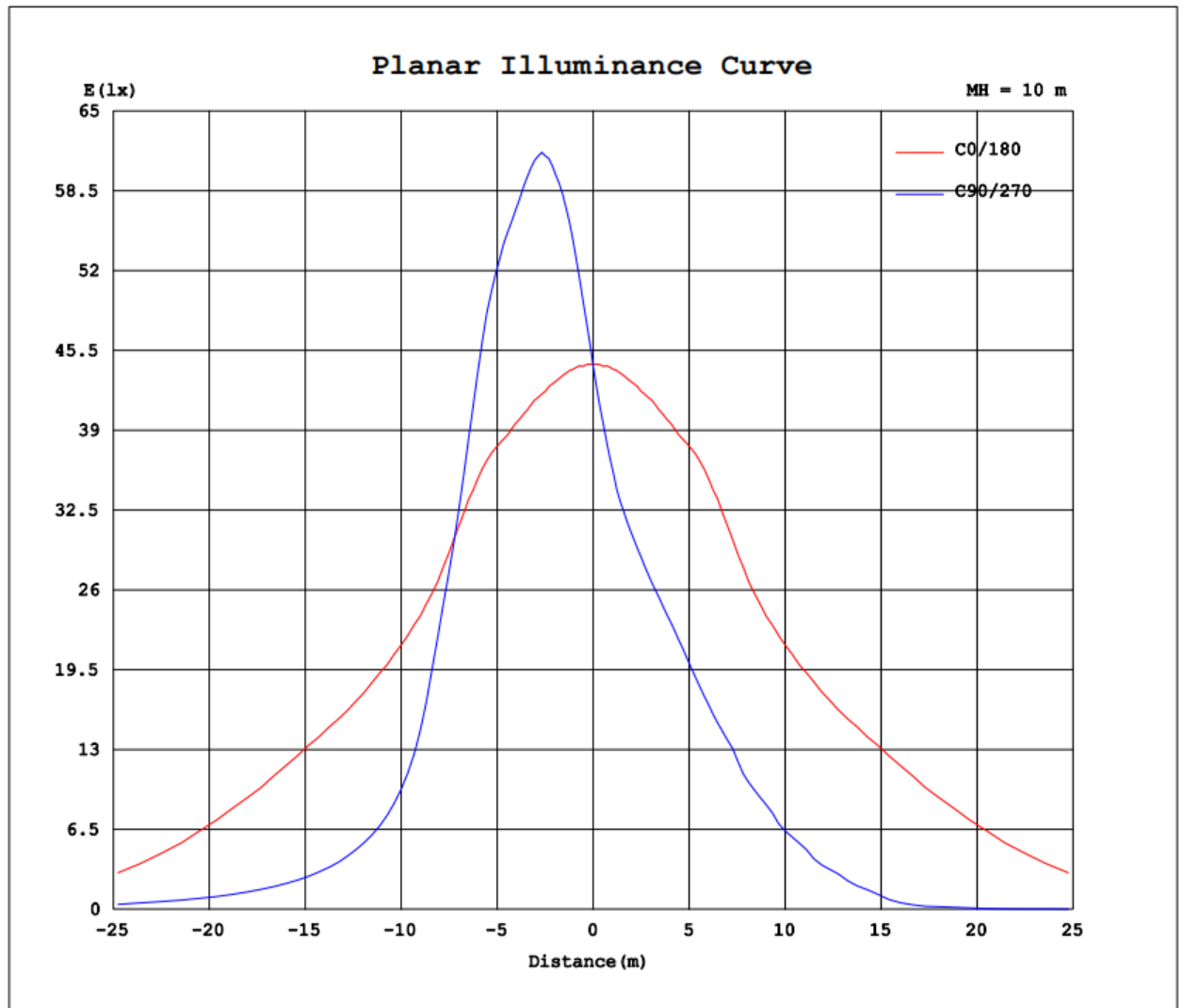
Total Luminaire Efficiency = 100.00%

Prüfbericht Nr. / Test report no. 60397062 001

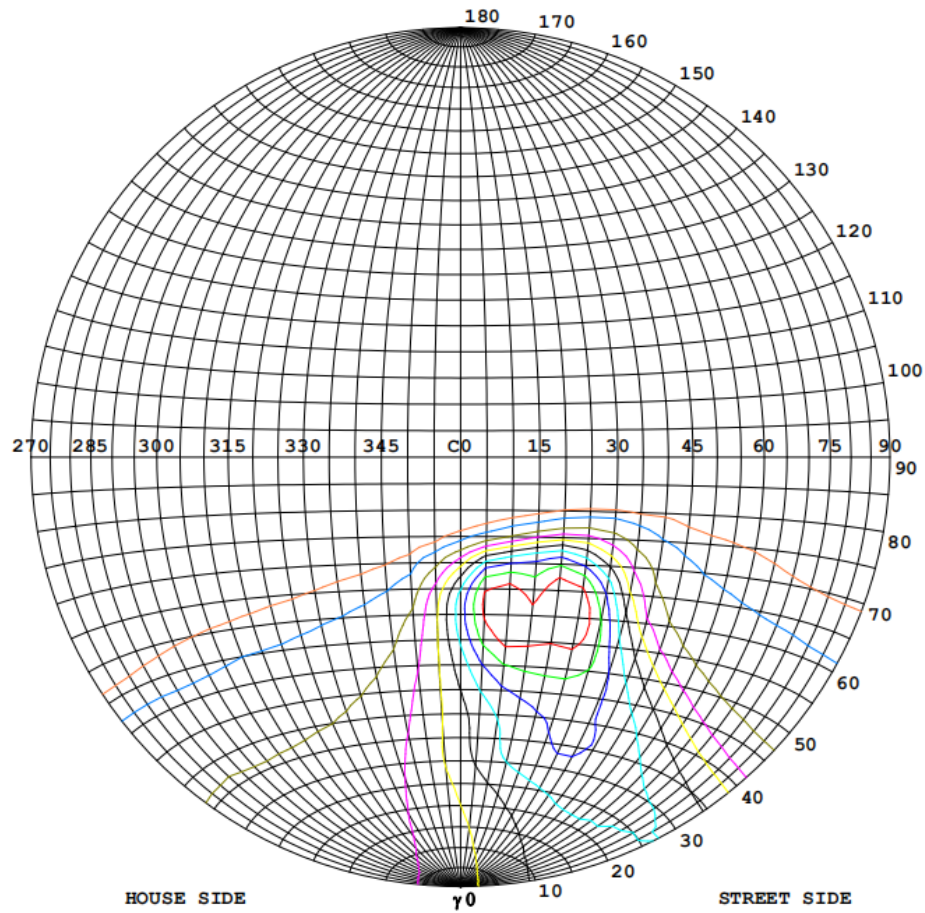
Luminous Intensity Distribution Data

Total View EL-SL18LA 120W CLASS 1 ZT5TF 4000KIES																															
Vertical Angles		Keywords										Candela										30									
		Horizontal Angles										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								
36	5614.53	5669.47	5772.48	5980.65	6222.70	6543.48	6910.56	7315.49	7693.06	8097.82	8464.81	8863.68	8763.49	8466.80	8108.41	7663.18	7160.27	6462.20	5693.34	4890.42	4266.71	3660.13	↕								
37	5346.03	5397.27	5490.29	5681.81	5952.48	6298.39	6709.15	7163.74	7627.49	8059.90	8461.15	8856.82	8713.38	8506.45	8146.90	7708.37	7182.69	6468.83	5675.48	4881.00	4214.11	3595.65									
38	5067.48	5117.65	5209.50	5390.52	5662.24	6044.21	6480.24	6973.19	7521.63	7993.44	8434.36	8850.06	8740.53	8564.41	8163.50	7710.62	7242.22	6509.50	5694.69	4898.95	4179.63	3549.34									
39	4723.31	4784.44	4892.45	5056.79	5361.60	5775.39	6260.98	6792.25	7360.19	7933.73	8399.67	8848.94	8756.13	8514.69	8237.62	7831.99	7333.93	6590.30	5698.53	4834.34	4126.18	3494.08									
40	4351.10	4396.34	4532.89	4764.76	5088.52	5471.62	5924.48	6465.96	7088.47	7634.73	8331.98	8823.68	8746.41	8681.89	8353.25	7951.07	7412.54	6642.52	5746.60	4919.00	4104.95	3432.00									
41	3921.09	3999.19	4128.67	4406.98	4744.09	5174.46	5698.40	6340.55	7064.53	7708.01	8269.93	8803.59	8778.27	8761.20	8436.99	8011.80	7546.05	6744.29	5794.25	4924.49	4098.02	3366.02									
42	3544.67	3600.68	3737.07	4032.69	4398.27	4875.48	5491.71	6077.71	6896.53	7548.67	8212.30	8808.49	8825.98	8860.87	8425.94	8213.48	7699.19	6867.44	5819.20	4817.52	3998.62	3302.92									
43	3231.01	3255.08	3373.03	3652.90	4006.43	4523.05	5117.05	5623.20	6410.18	7375.67	8125.22	8642.51	8882.57	8971.65	8787.03	8406.14	7893.87	7027.02	5921.38	4816.51	3964.93	3246.93									
44	2981.09	2998.06	3086.96	3296.95	3621.68	4150.06	4799.56	5529.90	6346.71	7178.08	8023.01	8622.12	8964.21	9100.39	8961.07	8603.14	8087.44	7185.61	6102.42	4823.87	3916.35	3187.00									
45	2763.93	2791.71	2862.04	3030.75	3270.83	3764.09	4426.41	5235.91	6046.41	6976.93	7900.03	8655.42	9076.86	9236.88	9130.35	8817.42	8324.02	7383.05	6087.54	4823.70	3869.88	3116.14									
46	2585.16	2603.54	2669.53	2790.98	2990.28	3401.11	4061.62	4925.52	5763.50	6728.06	7803.77	8669.94	9187.61	9380.32	9312.42	9059.35	8549.09	7569.63	6203.91	4845.02	3826.53	3047.93									
47	2419.63	2435.51	2488.73	2609.79	2771.13	3077.86	3669.55	4568.44	5467.88	6463.49	7640.29	8688.13	9315.07	9593.32	9470.97	9283.96	8797.16	7700.29	6284.58	4823.66	3759.27	2968.56									
48	2278.69	2304.10	2342.98	2468.45	2588.01	2837.81	3380.10	4180.85	5165.49	6193.67	7456.56	8368.78	9467.04	9715.13	9667.18	9513.75	9073.38	8000.42	6432.16	4842.57	3701.44	2886.78									
49	2158.98	2173.14	2216.34	2312.78	2432.10	2638.91	3107.29	3795.64	4835.33	5928.81	7235.20	8631.16	9614.25	9896.40	9846.91	9727.99	9364.46	8227.85	6551.59	4895.61	3636.30	2814.41									
50	2054.52	2066.14	2103.79	2182.40	2287.96	2465.23	2767.88	3385.66	4462.13	5634.04	6982.43	8532.15	9700.35	10111.54	10023.97	9981.96	9662.97	8489.02	6659.63	4833.96	3591.17	2718.15									
51	1953.08	1965.07	2001.78	2064.34	2167.41	2329.28	2579.31	3066.45	4071.89	5360.11	6745.79	8445.12	9951.17	10301.13	10228.46	10240.09	10005.65	8791.34	6808.44	4845.58	3492.49	2635.02									
52	1861.86	1876.93	1903.01	1964.90	2059.41	2200.75	2425.06	2816.92	3691.95	5043.27	6474.11	8293.03	9855.52	10497.14	10341.36	10510.53	10341.03	9077.06	6941.48	4845.37	3412.16	2544.11									
53	1764.71	1786.81	1810.50	1876.99	1957.69	2089.04	2274.64	2707.07	3311.16	4686.65	6200.54	8100.63	10100.27	10693.07	10608.74	10735.78	10693.84	9423.56	7118.28	4853.42	3324.74	2461.95									
54	1685.73	1703.09	1730.60	1781.90	1862.25	1980.79	2157.16	2445.31	3017.19	4307.63	5945.55	7916.43	10109.44	10965.01	10809.13	10937.01	11030.22	9747.21	7309.08	4872.91	3252.04	2372.47									
55	1611.89	1621.31	1648.80	1676.93	1735.53	1778.47	1881.20	2044.42	2299.31	2773.29	3920.63	5659.08	7681.64	10131.11	11250.37	10995.69	11111.78	11368.70	10038.27	7437.14	4852.59	3146.17	2269.59								
56	1540.33	1548.88	1571.85	1630.90	1695.27	1799.33	1937.58	2177.56	2684.14	3538.04	5369.52	7456.61	10136.24	11520.41	11291.69	11208.12	11647.26	10295.81	7639.52	4861.39	3048.74	2186.26									
57	1473.55	1480.57	1507.21	1566.53	1612.55	1711.14	1868.57	2065.46	2434.04	3217.50	5051.51	7266.75	10120.96	11755.92	11417.46	11280.85	11894.98	10518.13	7736.22	4835.39	2949.77	2097.62									
58	1413.14	1420.99	1448.80	1487.08	1537.05	1637.56	1742.01	1963.74	2290.27	2933.84	4653.51	7021.09	9989.38	11938.49	11582.86	11323.71	12081.34	10763.82	7873.61	4816.12	2829.08	1996.72									
59	1352.78	1361.49	1386.96	1429.55	1478.21	1563.71	1680.11	1863.66	2164.52	2730.58	4301.03	6881.99	9910.32	12141.50	11796.87	11268.34	12146.54	10909.38	7944.98	4821.56	2721.40	1905.99									
60	1292.43	1302.23	1325.02	1372.42	1418.52	1481.93	1606.12	1776.45	2044.04	2599.33	3923.77	6599.29	9707.56	12161.52	11838.18	11220.14	12151.65	11054.19	7912.93	4752.98	2583.85	1798.20									
61	1232.97	1247.21	1266.42	1315.29	1358.08	1427.61	1532.64	1692.67	1939.94	2425.49	3607.77	6277.44	9501.42	12156.13	11889.96	11122.47	12124.08	11166.19	7959.31	4694.91	2461.80	1692.42									
62	1174.59	1185.30	1207.41	1258.08	1298.08	1367.82	1453.23	1615.23	1838.51	2288.81	3352.57	6031.43	9361.69	12095.93	11895.20	10965.68	12087.68	11127.73	7931.30	4617.05	2300.34	1580.68									
63	1112.53	1123.75	1144.92	1196.75	1242.36	1307.91	1401.90	1538.51	1745.91	2163.86	3097.87	5671.83	9026.14	11867.97	11898.40	10781.40	11591.73	11137.38	7752.67	4455.33	2125.25	1440.59									
64	1061.46	1066.01	1090.01	1139.35	1179.36	1240.47	1332.87	1465.92	1659.06	2058.01	2928.14	5376.78	8797.17	11578.98	11847.50	10593.31	11658.43	11040.46	7594.66	4292.23	1948.67	1311.63									
65	1004.79	1015.55	1039.17	1081.02	1117.35	1185.58	1266.47	1396.59	1572.91	1943.68	2775.31	5103.12	8486.56	11263.93	11691.09	10369.25	11342.45	1081.02	7184.08	3996.68	1737.17	1178.08									
66	945.78	955.17	986.70	1024.83	1061.71	1126.49	1206.53	1327.64	1491.58	1846.68	2626.26	4656.46	8065.52	10835.08	11469.58	10179.37	10954.50	10468.49	6817.61	3652.48	1553.44	1044.86									
67	878.76	890.72	923.45	975.44	1011.04	1070.29	1141.79	1261.43	1413.82	1754.84	2432.44	4364.45	7123.18	10345.17	11127.18	9862.12	10476.37	9916.15	6282.74	3305.01	1369.16	926.77									
68	785.47	796.30	827.73	877.73	926.70	1011.35	1083.73	1147.59	1240.60	1450.83	2149.60	3759.13	6269.19	9764.48	10707.23	9871.47	9887.88	9712.71	6558.90	3202.19	1195.92	741.67									

Tool_View EL-S18L8A 120W CLASS 7 T25TF 4000KIES																										
Keywords						Candela										2D					3D					
Vertical Angles	Horizontal Angles					Multiplier=1	Max_Cd																			
	255	260	265	270	275		280	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355	360			
38	3549.34	4179.63	4858.95	5694.69	6509.50	7242.22	7770.62	8169.50	8564.41	8740.53	8860.06	8434.63	7993.44	7521.63	6990.24	6484.21	6062.64	5677.14	5399.50	5207.46	5099.90	5067.89				
39	3494.08	4126.08	4834.78	5688.53	6550.30	7293.54	7831.99	8237.62	8614.69	8756.13	8848.94	8399.67	7933.17	7360.19	6792.25	6230.96	5775.39	5381.60	5095.79	4892.45	4784.44	4723.31				
40	3432.00	4084.15	4819.00	5726.60	6642.42	7412.54	7951.07	8353.25	8681.89	8748.41	8823.86	8391.78	7834.74	7208.47	6595.96	5964.48	5471.82	5088.52	4764.76	4528.89	4394.34	4351.10				
41	3366.02	4038.02	4824.49	5784.25	6744.29	7546.05	8081.80	8495.99	8761.20	8787.19	8803.59	8263.93	7708.01	7064.53	6365.30	5698.40	5174.46	4840.19	4406.98	4152.67	3996.31	3921.09				
42	3302.92	3998.67	4815.72	5819.20	6867.44	7699.19	8213.48	8623.44	8860.87	8825.98	8808.49	8215.20	7545.67	6896.53	6237.71	5621.71	5142.71	4875.48	4388.27	4032.69	3737.07	3600.88				
43	3246.93	3964.93	4816.51	5821.34	6921.07	7893.87	8406.41	8787.43	8971.65	8882.57	8823.51	8125.22	7375.67	6610.18	5914.23	5171.05	4523.05	4083.45	3652.99	3373.03	3250.88	3231.01				
44	3187.00	3916.35	4823.87	5900.12	7185.61	8087.44	8603.14	8961.07	9100.39	8964.21	8842.22	8023.01	7178.08	6346.71	5523.90	4799.56	4150.06	3621.68	3236.75	2986.96	2981.29	2981.29				
45	3117.14	3869.88	4823.70	5945.74	7383.05	8324.02	8807.42	9130.35	9236.88	9067.86	8855.42	8003.01	6976.93	6046.41	5235.91	4426.41	3764.09	3270.83	3009.75	2862.04	2731.91	2763.93				
46	3047.97	3826.53	4844.62	6203.91	7668.96	8549.09	9059.35	9312.42	9380.32	9187.51	8869.94	7803.77	6728.06	5763.50	4925.52	4061.62	3401.11	2980.28	2790.98	2669.53	2603.54	2595.16				
47	2980.56	3769.27	4842.65	6294.58	7770.25	8737.16	9283.96	9477.50	9593.32	9315.07	8899.34	7640.25	6463.49	5467.88	4569.44	3683.55	3077.66	2771.13	2608.78	2488.72	2435.51	2419.69				
48	2906.79	3701.44	4842.07	6432.16	8002.42	9073.39	9513.75	9667.19	9715.14	9465.07	8837.68	7456.56	6193.67	5185.49	4180.85	3308.10	2807.81	2598.08	2448.65	2342.98	2300.12	2278.69				
49	2814.11	3636.30	4855.61	6551.59	8227.65	9364.46	9797.99	9846.61	9896.40	9614.25	8631.16	7295.20	5928.81	4835.33	3785.64	3002.19	2638.19	2432.92	2312.78	2216.34	2179.14	2158.96				
50	2718.15	3535.11	4833.96	6659.63	8488.02	9652.97	9881.96	10023.97	10111.54	9700.35	8532.15	6928.43	5634.04	4462.13	3395.66	2767.88	2465.23	2287.96	2182.40	2103.79	2066.14	2054.52				
51	2635.02	3492.49	4845.58	6808.44	8791.34	10005.65	10240.09	10228.46	10301.13	9851.17	8445.12	6749.79	5350.11	4071.89	2865.66	2579.31	2323.28	2167.41	2064.34	2001.78	1965.07	1953.08				
52	2548.11	3411.16	4845.93	6941.48	9077.06	10341.03	10551.04	10513.34	10437.14	9955.92	8253.03	6474.11	5043.27	3691.95	2816.42	2425.06	2200.75	2059.01	1964.90	1903.17	1879.33	1861.85				
53	2461.95	3324.74	4853.42	7111.28	9423.56	10693.84	10776.78	10608.74	10693.47	10010.27	8103.68	6200.54	4686.65	3311.16	2407.07	2274.84	2089.04	1957.95	1871.89	1810.50	1766.81	1764.71				
54	2372.47	3252.04	4872.91	7309.08	9747.21	11033.22	10937.01	10809.13	10965.01	10109.44	7916.43	5945.55	4307.63	3017.19	2645.31	2157.16	1980.79	1862.25	1786.90	1730.60	1703.09	1685.73				
55	2269.59	3146.17	4852.99	7437.14	10038.27	11368.70	11129.18	10995.69	11250.37	10131.11	7681.64	5659.08	3920.67	2773.29	2299.31	2044.42	1881.90	1789.47	1701.53	1648.80	1621.31	1611.89				
56	2168.04	3048.74	4861.34	7639.52	10295.81	11647.26	11209.12	11219.74	11520.41	10136.24	7456.61	5369.52	3638.50	2584.14	2177.56	1937.58	1799.33	1676.27	1630.90	1571.85	1545.88	1540.33				
57	2062.97	2949.77	4835.39	7738.22	10518.13	11894.38	11285.05	11447.16	11755.92	10120.96	7266.75	5051.51	3317.57	2434.04	2065.45	1848.57	1711.14	1612.55	1556.53	1507.21	1480.57	1473.55				
58	1995.72	2829.06	4816.12	7873.61	10763.82	12091.84	11323.71	11582.86	11938.49	9989.38	7021.09	4651.51	2933.84	2290.27	1963.74	1762.01	1637.56	1537.05	1487.83	1448.80	1420.99	1413.14				
59	1905.99	2721.40	4821.56	7944.98	10909.38	12415.65	11268.34	11739.87	12141.50	9910.32	6811.93	4301.73	3020.58	2164.52	1863.66	1680.11	1563.71	1478.21	1429.55	1386.96	1361.49	1362.78				
60	1798.20	2582.85	4752.98	7912.93	11054.14	12156.51	11260.14	11666.18	12161.62	9707.56	6569.29	3923.77	2559.33	2044.04	1776.46	1606.12	1481.93	1418.52	1372.42	1325.02	1290.00	1292.43				
61	1692.42	2461.80	4694.91	7959.31	11166.19	12124.08	11227.42	11889.96	12156.13	9501.42	6277.46	3607.77	2425.19	1939.94	1692.67	1532.64	1427.61	1398.80	1315.29	1266.42	1247.21	1232.97				
62	1580.68	2300.34	4617.05	7931.30	11217.73	12087.68	11095.68	11895.20	12095.93	9361.69	6031.43	3352.57	2288.81	1838.51	1615.23	1469.23	1367.82	1298.09	1258.08	1208.47	1185.30	1174.59				
63	1440.59	2125.25	4455.33	7752.67	11137.38	11919.73	10791.40	11698.40	11867.97	9026.14	5671.83	3097.87	2163.86	1745.91	1538.41	1401.99	1307.91	1242.36	1196.75	1144.92	1123.73	1112.53				
64	1311.53	1948.67	4292.23	7584.66	11054.40	11598.43	10593.31	11847.75	11578.98	8797.71	5376.78	2928.14	2058.81	1659.06	1455.92	1332.87	1240.47	1179.35	1139.35	1090.01	1066.01	1061.46				
65	1178.08	1737.57	3996.68	7184.08	10811.02	11342.45	10369.25	11691.09	11263.93	8486.50	5013.02	2775.13	1943.68	1572.91	1396.69	1266.47	1185.58	1117.31	1081.02	1038.17	1011.55	1004.79				
66	1044.86	1553.44	3652.48	6817.61	10468.49	10954.50	10129.87	11449.58	10835.08	8052.46	4586.56	2266.25	1846.68	1491.65	1267.53	1206.52	1126.49	1106.71	1024.83	983.70	955.17	945.78				
67	921.67	1369.16	3305.01	6282.74	9916.15	10476.37	9862.12	11127.18	10545.17	7723.18	4364.24	2492.84	1754.74	1419.82	1261.43	1147.51	1070.29	1012.04	975.44	923.45	890.72	878.76				
68	796.24	1195.92	2883.12	5665.80	9322.71	9882.85	9850.47	10732.33	10374.48	7163.12	4022.14	2349.60	1650.52	1340.50	1191.78	1083.25	1011.35	958.70	907.73	832.76	795.30	765.57				
69	685.48	1027.46	2479.56	5045.05	8625.59	9273.74	9275.68	10238.94	9064.20	6005.54	3751.70	2225.36	1563.24	1271.37	1128.18	1028.33	988.63	889.75	811.83	696.65	620.89	598.20				
70	673.73	967.91	2641.11	4598.77	7958.68	8448.90	8321.73	9651.99	8193.40	6076.67	3479.41	2068.99	1463.94	1147.89	1069.00	967.67	878.62	785.76	711.81	624.63	577.91	554.46				



STREETLIGHT ISOCANDELA DIAGRAM

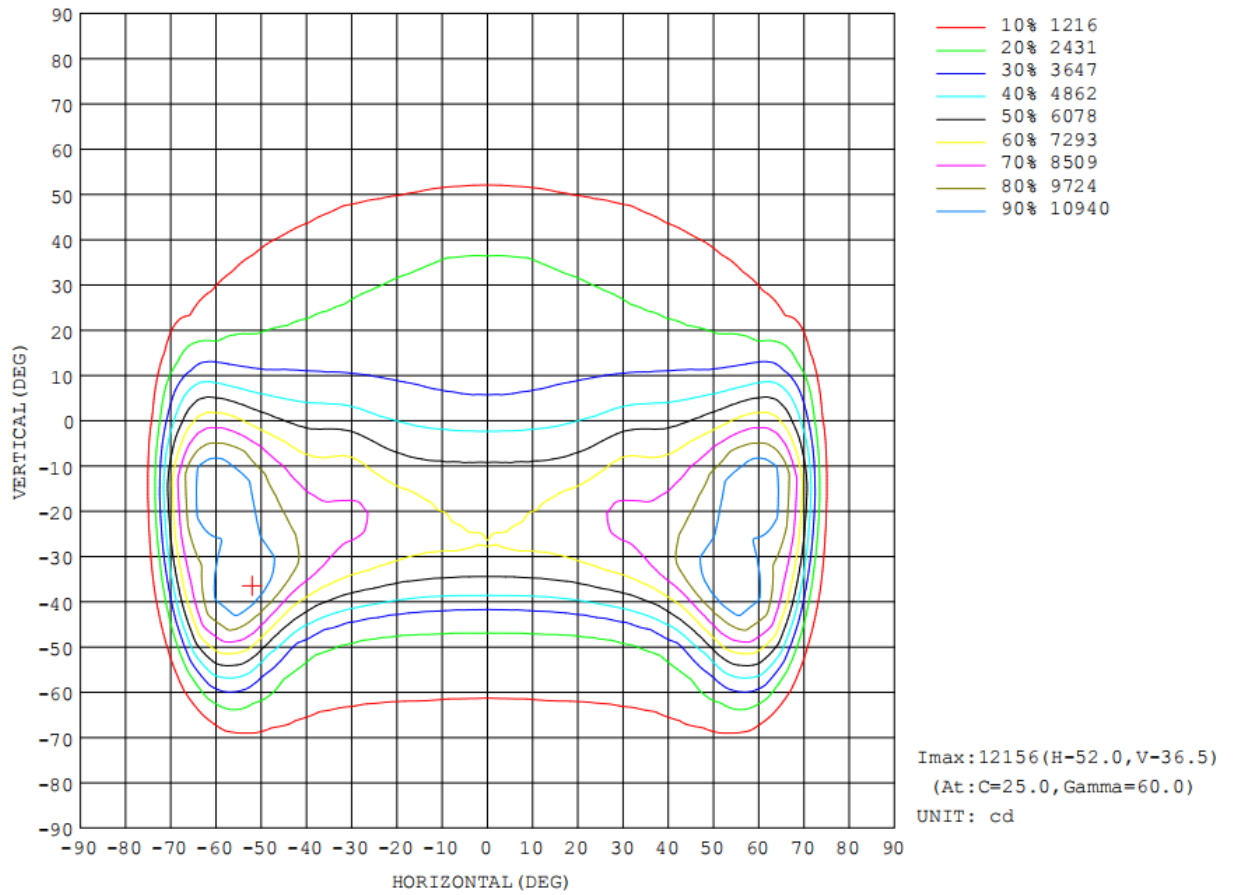


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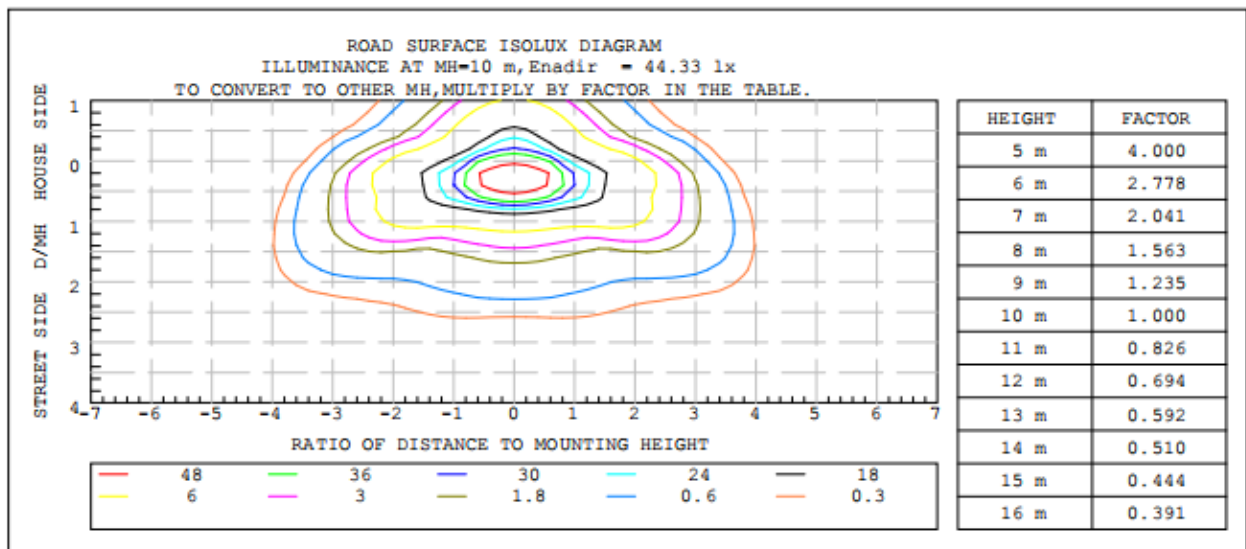
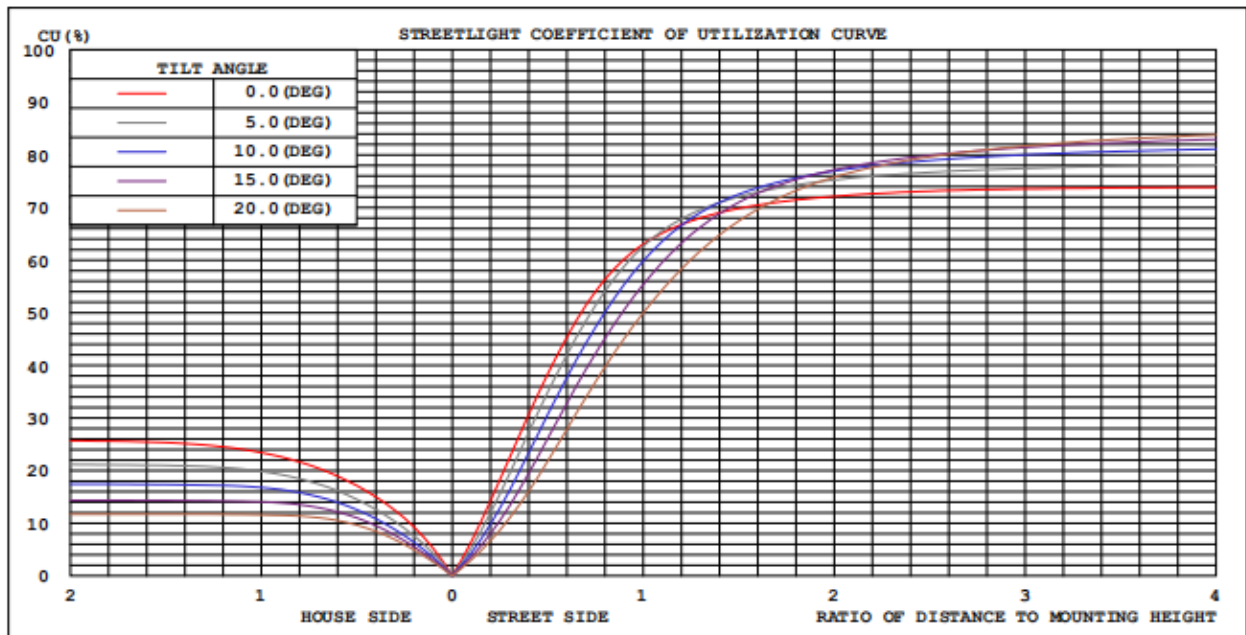
IES: Type II - Short
CIE: Narrow - Intermediate
IES: Full cut-off
CIE: Semi-cut-off
Max. At 80: 42.67cd/klm
Max. At 90: 0cd/klm
Max. 80-90: 42.67cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	12162
90%	10945
80%	9729
70%	8513
60%	7297
50%	6081
40%	4865
30%	3648
20%	2432
10%	1216
5%	608

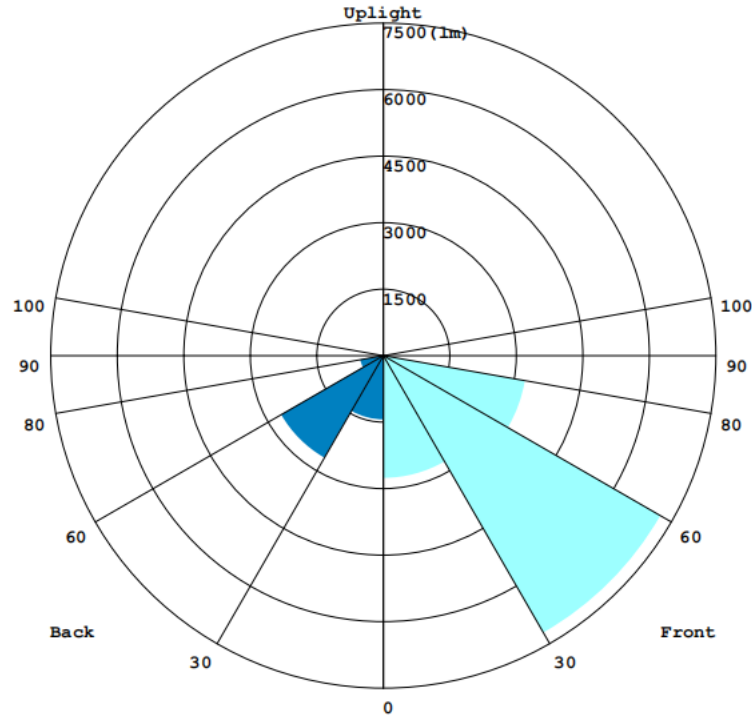
ISOCANDELA DIAGRAM



COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



LCS REPORT



IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	2758.8	15.4
FM - Front-Medium(30-60)	7216.5	40.3
FH - Front-High(60-80)	3248.3	18.1
FVH - Front-Very High(80-90)	55.034	0.3
Total Forward Light	13279	74.1

BL - Back-Low(0-30)	1441.3	8.0
BM - Back-Medium(30-60)	2660.1	14.9
BH - Back-High(60-80)	526.33	2.9
BVH - Back-Very High(80-90)	2.853	0.0
Total Back Light	4630.6	25.9

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
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	4630.6	0	4630.6
Street Side	13279	0	13279

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

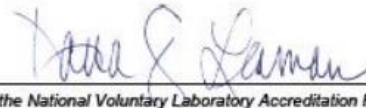
*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

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