

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P150321

Luminaire Tested: **AVS-E02-LED-E-U-SL2-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P150321
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33678)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: AVS-E02-LED-E-U-SL2-7050
Description: VISION SITE SMALL LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6269.7 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



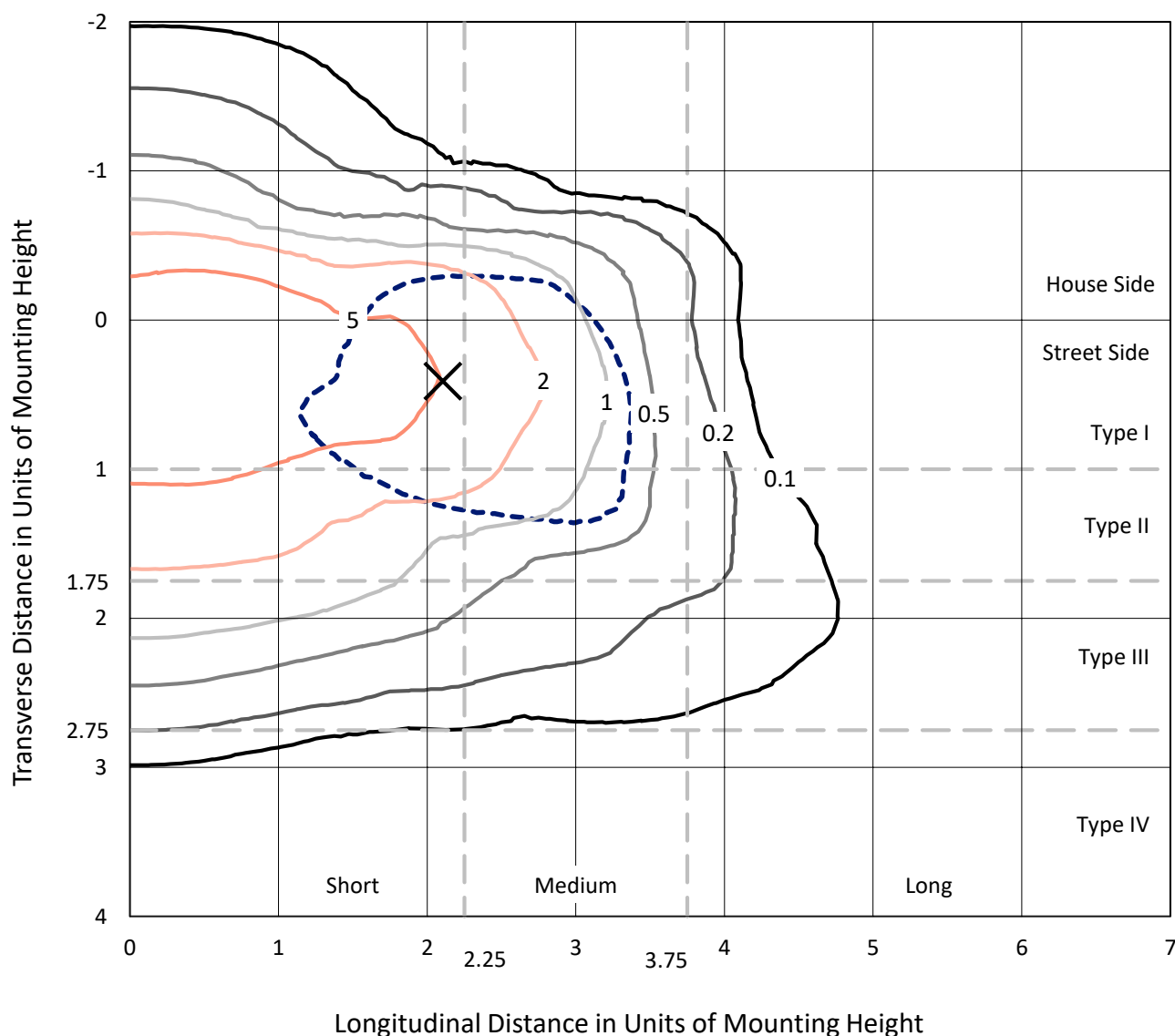
REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

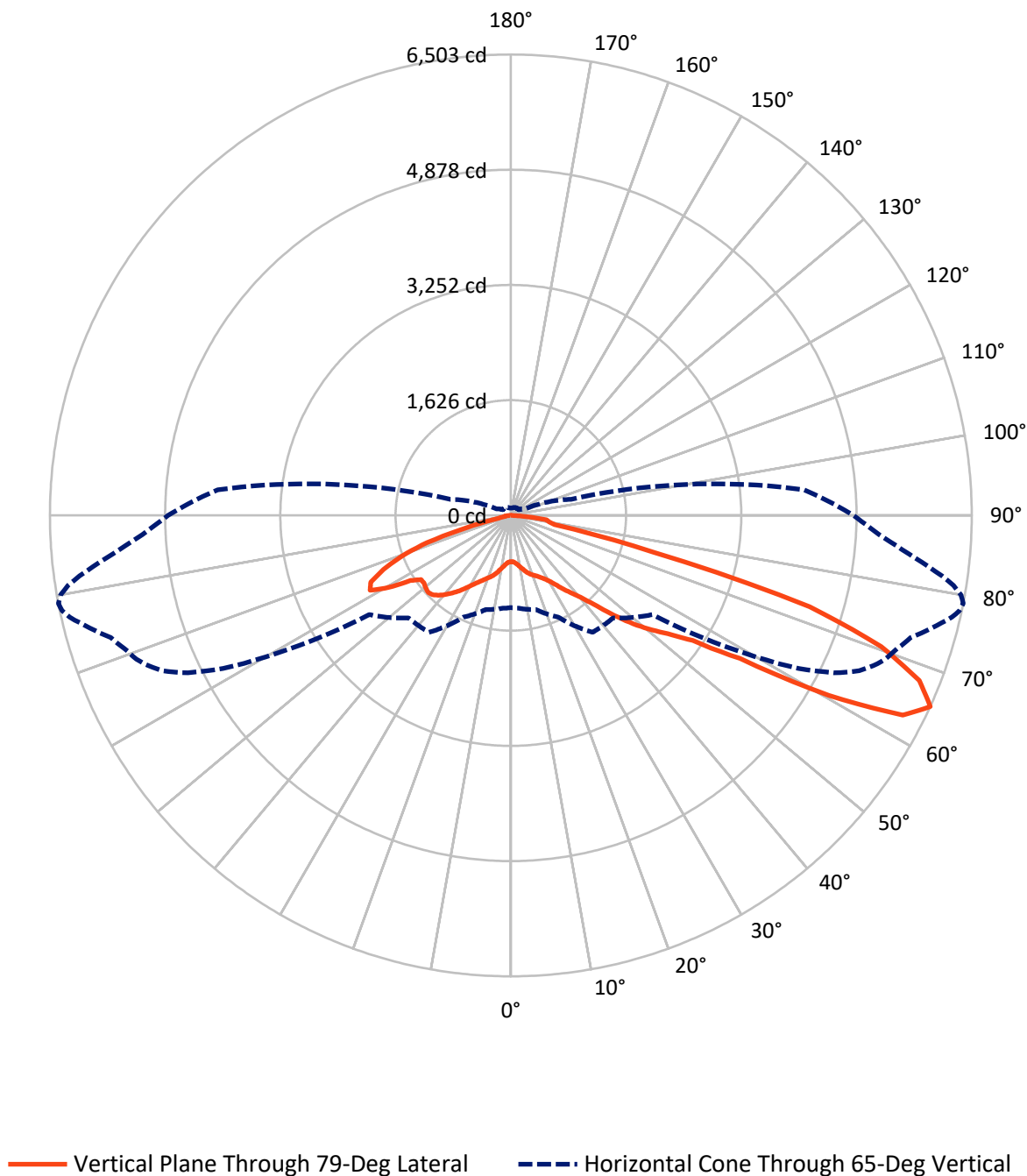


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

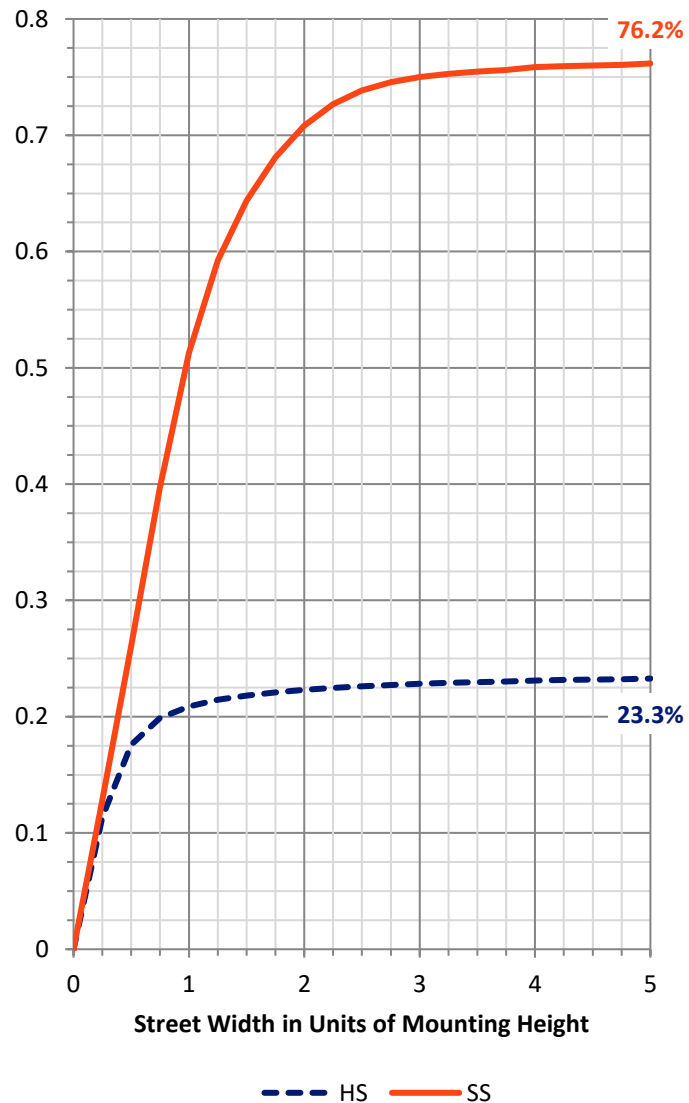
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1482.1	0.0	1482.1
	% Fixture	23.6	0.0	23.6
Street Side	Lumens	4787.6	0.0	4787.6
	% Fixture	76.4	0.0	76.4
Total	Lumens	6269.7	0.0	6269.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.0
10°-20°	212.1	3.4
20°-30°	366.4	5.8
30°-40°	606.5	9.7
40°-50°	1028.6	16.4
50°-60°	1366.6	21.8
60°-70°	1765.3	28.2
70°-80°	740.4	11.8
80°-90°	118.9	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6269.7	100.0
0°-180°	6269.7	100.0

Coefficient of Utilization



REPORT NUMBER: P150321

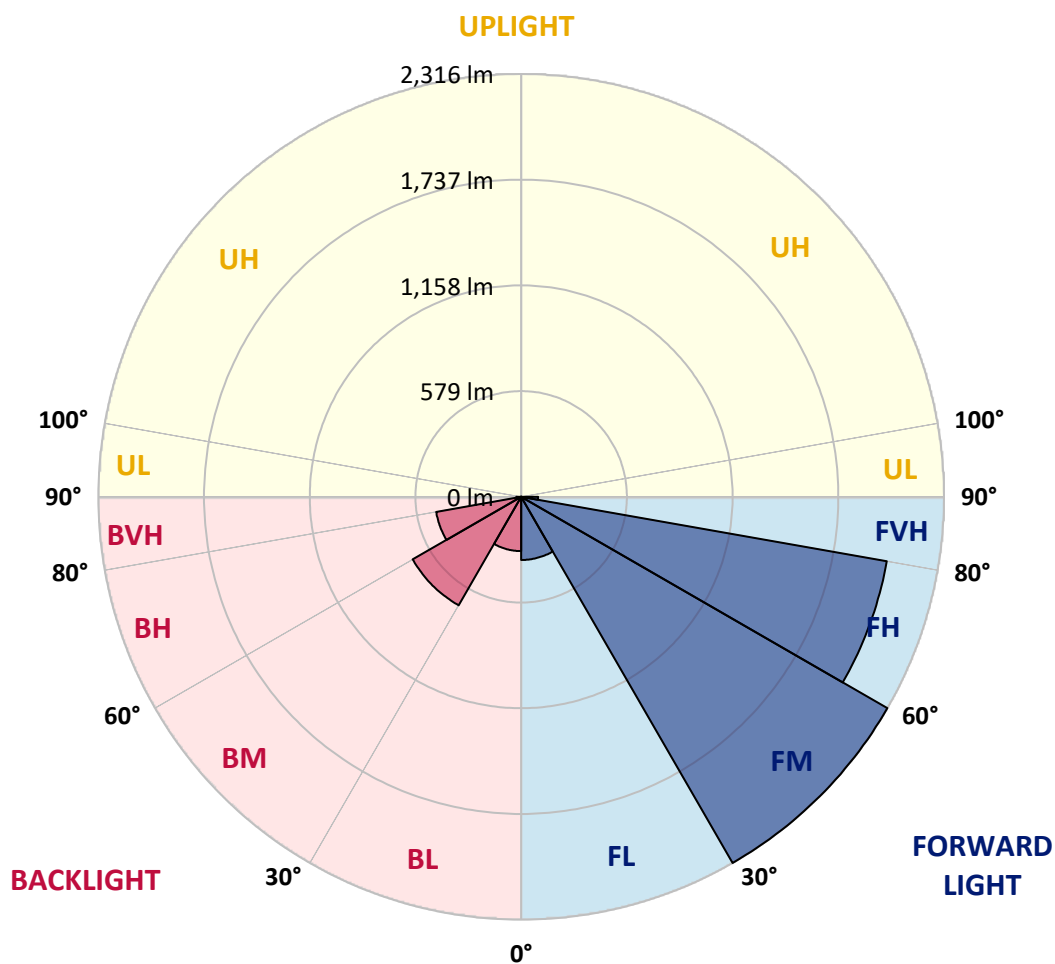
CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	345.9	5.5			
FM	(30°-60°)	2315.6	36.9			
FH	(60°-80°)	2033.0	32.4			G2/5000
FVH	(80°-90°)	93.0	1.5			G1/100
BL	(0°-30°)	297.4	4.7	B1/500		
BM	(30°-60°)	686.1	10.9	B1/1000		
BH	(60°-80°)	472.7	7.5	B1/500		G1/500
BVH	(80°-90°)	25.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6
2.5°	650.6	652.6	651.2	652.6	654.0	654.6	656.1	655.3	655.3	656.1	654.6
5°	650.6	650.6	652.6	656.1	657.4	661.5	666.3	665.6	666.3	665.6	666.9
7.5°	664.2	663.5	665.6	669.7	671.1	677.2	685.4	686.8	688.2	688.2	690.3
10°	688.2	687.5	689.5	691.6	693.7	698.4	710.1	714.8	715.5	716.3	719.0
12.5°	718.2	717.6	714.8	714.8	714.2	723.1	738.8	747.7	749.0	751.8	753.9
15°	739.5	737.4	733.4	730.6	734.0	748.4	771.6	781.9	783.2	785.3	790.8
17.5°	760.0	757.9	749.0	742.2	747.0	770.3	801.8	812.6	815.4	817.5	823.6
20°	788.7	787.4	774.4	757.9	756.6	786.6	825.0	839.4	841.5	844.1	850.3
22.5°	832.5	826.3	811.3	780.5	765.5	796.3	841.5	861.2	863.9	866.7	874.9
25°	887.3	884.5	858.5	811.3	779.8	805.8	859.2	883.8	887.9	891.3	902.3
27.5°	944.0	939.9	911.9	850.3	805.2	825.0	887.3	915.3	920.7	926.2	936.5
30°	994.6	993.3	970.1	903.0	846.2	861.2	932.4	966.6	972.7	979.6	989.1
32.5°	1113.7	1114.3	1090.4	1022.0	945.4	926.9	997.4	1048.7	1051.4	1059.6	1076.7
35°	1341.5	1344.2	1335.3	1281.2	1195.0	1119.2	1126.0	1176.6	1179.4	1186.2	1202.6
37.5°	1494.0	1499.5	1526.8	1543.9	1500.2	1465.3	1378.4	1358.5	1360.6	1356.5	1353.1
40°	1578.1	1586.3	1658.1	1747.2	1795.0	1795.6	1758.0	1670.5	1637.0	1627.4	1586.3
42.5°	1626.0	1639.7	1741.7	1893.5	2031.0	2125.4	2148.7	2051.5	2026.9	1983.1	1904.5
45°	1657.5	1673.9	1794.3	2002.3	2204.8	2365.5	2486.6	2443.5	2427.0	2400.4	2327.9
47.5°	1652.0	1665.1	1790.3	2039.2	2295.8	2524.2	2739.1	2783.5	2763.6	2756.8	2707.6
50°	1552.1	1563.8	1691.0	1947.6	2245.8	2584.5	2899.1	3025.0	3025.0	3037.9	3022.9
52.5°	1445.5	1455.0	1570.7	1801.1	2084.4	2525.6	2988.0	3196.7	3224.0	3246.6	3282.2
55°	1405.1	1416.7	1504.2	1701.2	1946.8	2357.3	3018.1	3325.3	3375.9	3414.2	3494.9
57.5°	1424.2	1435.9	1498.1	1647.3	1866.1	2185.6	3019.5	3498.3	3596.2	3674.8	3838.3
60°	1507.0	1517.9	1569.9	1697.2	1845.0	2086.4	2961.3	3774.0	3929.9	4077.7	4350.1
62.5°	1468.7	1482.4	1558.3	1780.0	2003.0	2011.2	2751.3	3987.5	4238.5	4456.7	4889.7
65°	1301.1	1315.4	1375.0	1582.3	2012.5	2044.0	2440.1	3991.5	4303.5	4598.3	5065.5
67.5°	987.8	993.3	1040.5	1206.7	1609.6	2080.2	2119.9	3518.9	3815.8	4144.8	4627.0
70°	504.9	514.4	528.1	666.3	1036.4	1719.1	1821.7	2593.3	2971.6	3311.6	3891.0
72.5°	175.1	178.5	192.2	254.5	504.9	1128.1	1594.6	1777.2	2005.7	2323.8	2994.8
75°	105.4	105.4	110.2	128.6	230.6	587.6	1418.8	1451.6	1482.4	1589.1	2028.3
77.5°	83.4	84.9	84.9	88.3	127.9	301.7	1077.4	1349.6	1353.8	1364.0	1437.9
80°	59.5	62.3	67.8	70.5	82.8	165.6	604.8	1184.8	1265.5	1304.6	1358.5
82.5°	44.5	47.2	57.5	60.9	64.4	92.3	271.6	817.5	964.6	1042.5	1232.7
85°	19.8	23.2	39.0	43.1	45.2	49.2	127.3	232.5	267.5	300.3	396.1
87.5°	3.4	3.4	6.1	8.9	13.0	12.3	28.1	39.7	40.3	47.2	52.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6
2.5°	654.6	654.6	654.6	654.0	654.6	654.6	654.6	654.6	655.3	655.3	655.3
5°	669.0	667.7	668.3	668.3	668.3	667.7	669.0	668.3	669.0	671.1	670.4
7.5°	690.3	691.6	692.2	693.0	693.0	693.0	693.7	695.0	695.0	697.1	696.4
10°	721.7	721.0	721.7	723.7	725.8	726.5	728.5	727.9	729.2	731.9	734.7
12.5°	755.2	756.6	758.7	760.7	764.1	764.8	766.8	767.6	771.6	771.6	774.4
15°	792.8	793.5	797.6	798.3	802.4	803.8	807.3	808.6	813.4	814.1	816.8
17.5°	827.0	828.4	830.5	832.5	837.3	839.4	842.1	844.9	848.9	850.3	855.1
20°	854.4	857.1	857.8	862.0	866.0	868.8	871.5	874.2	878.3	880.4	885.2
22.5°	879.1	881.8	883.8	887.3	889.9	894.1	895.4	900.2	904.4	907.8	911.9
25°	905.7	909.8	911.9	918.0	920.1	924.1	927.6	932.4	937.8	942.0	947.5
27.5°	943.3	949.5	952.2	959.1	963.8	965.9	971.4	978.2	983.0	987.8	993.3
30°	995.3	1006.9	1009.0	1013.8	1022.7	1024.0	1030.9	1036.4	1043.9	1048.7	1053.5
32.5°	1076.1	1090.4	1091.8	1097.2	1104.8	1107.5	1113.0	1119.2	1130.8	1132.8	1140.3
35°	1199.9	1206.0	1211.5	1213.6	1219.7	1223.1	1227.3	1234.1	1245.7	1244.4	1252.5
37.5°	1348.3	1350.4	1351.1	1344.2	1345.6	1339.4	1346.9	1348.3	1352.4	1355.9	1364.0
40°	1560.4	1539.2	1536.4	1520.0	1503.6	1494.7	1491.3	1477.6	1481.0	1482.4	1489.2
42.5°	1870.3	1829.2	1795.0	1771.7	1731.4	1711.5	1684.9	1663.6	1647.3	1653.4	1656.2
45°	2262.9	2204.0	2149.3	2078.2	2025.5	1987.9	1940.7	1898.3	1879.2	1870.3	1881.2
47.5°	2654.9	2602.9	2538.5	2465.4	2382.0	2319.7	2241.0	2171.9	2124.0	2106.2	2115.9
50°	2993.5	2945.6	2897.0	2854.0	2756.8	2689.1	2581.7	2492.0	2416.8	2378.5	2368.3
52.5°	3274.6	3249.3	3223.3	3187.0	3109.1	3041.3	2955.9	2867.7	2767.8	2689.7	2663.1
55°	3525.7	3540.7	3527.8	3528.4	3497.6	3454.5	3382.1	3316.4	3246.6	3158.3	3121.5
57.5°	3891.7	3980.6	3998.3	4042.9	4064.8	4088.0	4108.5	4069.5	4051.7	3986.1	3986.7
60°	4468.4	4598.3	4711.2	4813.8	4897.9	4980.0	5066.2	5104.6	5146.9	5166.7	5234.5
62.5°	5082.0	5205.8	5374.1	5511.5	5588.8	5695.5	5789.3	5850.2	5924.8	6004.0	6107.4
65°	5233.8	5382.9	5489.0	5580.6	5657.3	5714.0	5765.4	5837.8	5900.1	6026.0	6147.8
67.5°	4844.6	4963.6	5060.7	5151.1	5210.6	5258.4	5304.2	5352.1	5458.9	5573.2	5695.5
70°	4158.4	4302.1	4462.9	4579.9	4609.2	4650.3	4694.1	4756.4	4809.7	4929.4	5022.5
72.5°	3341.0	3547.6	3683.7	3845.8	3880.7	3943.0	3967.6	4016.2	4025.8	4090.8	4115.3
75°	2328.6	2565.3	2702.1	2821.1	2844.4	2810.2	2823.8	2652.1	2608.4	2572.7	2544.0
77.5°	1537.1	1600.7	1622.6	1603.4	1511.8	1440.0	1363.3	1288.1	1296.3	1235.4	1128.7
80°	1366.7	1381.1	1361.3	1342.2	1289.4	1214.2	1145.2	1074.7	1039.8	1002.8	948.1
82.5°	1329.8	1385.3	1391.4	1368.2	1326.4	1244.4	1160.8	1056.2	967.3	885.2	801.8
85°	444.7	541.1	584.1	624.6	636.9	651.2	602.0	534.9	454.2	400.2	313.3
87.5°	56.8	70.5	81.5	69.7	81.5	95.8	69.1	77.3	78.0	48.6	36.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6
2.5°	656.1	655.3	655.3	655.3	654.6	655.3	655.3	655.3	655.3	655.3	654.6
5°	671.1	671.1	673.2	673.8	672.4	671.7	672.4	673.2	673.2	672.4	673.2
7.5°	699.2	699.8	701.1	703.2	701.9	702.6	703.2	702.6	704.6	705.3	704.6
10°	734.7	736.1	739.5	740.2	739.5	742.2	742.9	741.6	742.9	742.9	745.6
12.5°	775.8	777.1	781.2	782.6	783.9	784.7	786.6	787.4	789.4	790.8	792.8
15°	820.2	821.6	824.4	829.1	830.5	831.8	833.2	837.3	838.0	840.7	842.8
17.5°	857.8	859.9	863.9	867.4	869.4	872.8	874.2	879.1	880.4	884.5	887.9
20°	887.9	891.3	894.7	898.9	902.3	906.4	907.8	912.5	915.3	917.3	921.5
22.5°	915.3	919.4	924.1	929.0	931.7	937.2	939.3	941.2	947.5	950.2	954.3
25°	950.9	954.9	960.4	966.6	969.3	976.2	978.2	981.7	988.5	991.2	997.4
27.5°	999.4	1004.9	1009.0	1015.1	1018.5	1023.4	1028.2	1032.2	1038.4	1042.5	1049.3
30°	1060.3	1064.5	1071.3	1076.1	1081.6	1088.4	1093.8	1097.9	1101.3	1107.5	1115.0
32.5°	1149.9	1150.6	1152.6	1164.2	1169.7	1175.2	1182.8	1186.2	1191.6	1197.8	1206.0
35°	1261.5	1267.6	1272.3	1277.8	1284.0	1290.2	1292.8	1303.1	1308.0	1316.2	1324.4
37.5°	1372.2	1373.0	1383.8	1387.3	1392.7	1399.0	1408.5	1418.8	1431.1	1439.3	1452.3
40°	1491.3	1496.8	1510.5	1517.3	1524.1	1539.2	1546.6	1563.1	1583.6	1595.2	1617.1
42.5°	1663.6	1671.9	1696.5	1707.5	1723.8	1748.5	1764.2	1786.8	1795.0	1823.0	1833.3
45°	1889.4	1914.7	1950.3	1973.6	2003.0	2029.6	2043.3	2053.6	2065.9	2087.8	2085.1
47.5°	2133.6	2166.4	2206.1	2254.0	2273.2	2304.7	2322.4	2342.3	2331.3	2325.8	2320.4
50°	2383.9	2422.3	2474.9	2518.0	2547.5	2566.6	2581.7	2579.0	2555.6	2543.4	2509.1
52.5°	2662.4	2685.0	2734.9	2771.8	2789.6	2793.8	2790.4	2769.8	2747.9	2708.9	2668.6
55°	3089.2	3079.0	3098.9	3116.0	3110.5	3129.6	3080.4	3061.2	3007.2	2956.6	2902.5
57.5°	3956.7	3970.4	3859.5	3809.6	3800.7	3818.4	3731.6	3720.6	3590.1	3573.6	3482.6
60°	5225.0	5291.9	5205.1	5156.5	5025.2	4982.1	4885.0	4844.6	4719.4	4618.1	4490.3
62.5°	6178.5	6239.4	6275.6	6206.5	6129.9	6017.1	5870.1	5707.2	5574.5	5419.2	5283.7
65°	6264.8	6387.9	6471.3	6503.4	6449.4	6325.6	6144.4	5939.1	5736.0	5540.9	5369.9
67.5°	5861.8	5971.9	6101.2	6216.8	6223.6	6142.9	5988.4	5779.7	5545.1	5304.2	5103.8
70°	5169.5	5307.7	5420.6	5542.4	5627.2	5580.6	5503.3	5311.8	5068.3	4880.8	4650.3
72.5°	4204.2	4262.5	4289.8	4409.5	4410.9	4326.0	4271.3	4165.3	3969.0	3836.3	3660.4
75°	2455.1	2327.3	2191.1	2072.7	1976.3	1936.0	1756.7	1726.6	1606.2	1531.6	1422.2
77.5°	1012.4	898.1	751.1	628.7	507.6	452.8	373.5	338.7	293.5	273.7	260.6
80°	868.1	760.0	649.2	543.1	448.7	354.3	275.6	214.1	168.3	143.0	132.7
82.5°	708.7	643.7	566.4	508.9	435.0	364.6	307.9	238.8	178.5	131.3	100.5
85°	255.9	210.1	169.0	155.2	123.8	102.0	85.5	73.2	60.2	47.9	42.4
87.5°	28.7	27.4	15.8	15.0	17.1	12.3	14.4	13.0	11.0	9.5	10.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6	652.6
2.5°	654.6	654.6	655.3	655.3	656.1	656.7	658.0	657.4	657.4	658.0	658.0
5°	673.2	675.1	674.5	674.5	674.5	675.1	675.9	673.2	670.4	667.7	666.3
7.5°	705.3	706.6	708.0	706.6	708.0	707.4	706.0	698.4	689.5	678.5	671.1
10°	747.0	747.0	748.4	747.7	750.5	748.4	744.2	727.2	708.0	684.8	667.7
12.5°	792.1	796.9	794.9	795.5	801.0	795.5	786.0	760.7	726.5	688.8	658.8
15°	845.5	847.6	848.9	846.8	850.3	845.5	828.4	788.1	738.1	685.4	640.9
17.5°	889.3	889.9	890.7	892.0	896.8	891.3	862.0	807.3	740.8	669.7	610.9
20°	923.5	926.9	929.6	929.6	936.5	928.3	889.3	816.8	731.9	643.7	572.5
22.5°	959.1	961.8	965.2	965.9	974.8	966.6	911.9	814.7	708.7	606.7	528.1
25°	1002.8	1005.6	1008.3	1011.7	1024.0	1012.4	934.4	806.5	676.6	563.0	480.2
27.5°	1053.5	1059.6	1061.7	1067.2	1081.6	1063.7	953.6	794.2	640.9	512.3	429.6
30°	1121.1	1128.7	1131.5	1139.0	1158.9	1119.8	964.6	773.0	595.9	461.0	375.5
32.5°	1212.1	1222.4	1230.7	1238.9	1261.5	1176.0	965.9	742.2	543.1	403.6	323.5
35°	1331.2	1346.9	1353.1	1358.5	1379.8	1236.8	959.8	696.4	478.9	344.8	282.5
37.5°	1464.6	1480.3	1484.5	1487.2	1491.3	1288.8	944.7	626.6	406.3	293.5	249.6
40°	1628.8	1642.5	1647.9	1643.8	1622.0	1329.1	911.2	545.2	335.9	258.5	229.1
42.5°	1829.2	1849.7	1851.8	1833.3	1760.8	1351.7	844.1	449.4	280.5	233.3	213.5
45°	2077.5	2076.2	2064.6	2051.5	1912.0	1342.8	750.5	366.0	245.6	213.5	199.1
47.5°	2300.5	2277.3	2259.5	2221.1	2045.4	1290.9	629.3	303.0	224.4	198.3	186.7
50°	2483.2	2440.7	2403.1	2361.5	2144.6	1198.4	508.9	257.2	204.6	185.4	175.1
52.5°	2627.6	2576.2	2532.4	2491.4	2240.3	1095.9	417.3	223.7	185.4	172.4	162.2
55°	2853.3	2802.0	2732.2	2687.0	2386.7	1001.5	357.7	197.0	166.9	158.7	148.4
57.5°	3424.5	3379.3	3295.9	3178.9	2763.0	965.9	324.2	176.5	151.8	147.0	138.9
60°	4421.9	4348.6	4239.9	4120.8	3527.8	989.8	297.6	162.2	141.6	137.5	131.3
62.5°	5174.3	5045.7	4922.6	4812.4	4139.3	989.1	262.7	151.2	134.1	132.0	125.9
65°	5205.1	5074.4	4950.6	4835.0	4153.0	880.4	221.7	141.6	132.7	132.0	121.8
67.5°	4928.7	4787.2	4667.5	4521.7	3844.5	688.2	177.8	135.4	138.1	136.8	120.4
70°	4477.2	4292.5	4194.0	4050.4	3383.4	481.6	146.4	137.5	149.8	145.7	122.5
72.5°	3514.1	3374.5	3224.7	3124.9	2648.7	304.5	123.1	138.9	154.6	147.8	127.9
75°	1308.0	1345.6	1284.0	1262.1	1345.6	178.5	109.4	129.3	138.1	127.9	116.3
77.5°	264.0	252.4	239.4	236.7	305.8	110.2	100.5	112.2	106.0	93.7	94.4
80°	126.5	123.1	119.1	118.3	113.6	91.7	93.1	95.8	80.0	72.5	77.3
82.5°	84.1	79.4	78.0	75.2	76.6	82.1	88.3	82.1	61.6	57.5	69.7
85°	39.0	37.6	36.9	36.9	41.0	73.9	73.2	60.2	42.4	41.0	69.7
87.5°	9.5	9.5	10.3	9.5	11.0	21.9	19.2	18.4	15.8	17.8	32.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P150321

CATALOG NUMBER: AVS-E02-LED-E-U-SL2-7050

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	652.6	652.6	652.6
2.5°	657.4	658.0	657.4
5°	663.5	663.5	663.5
7.5°	663.5	661.5	660.8
10°	654.0	647.8	647.8
12.5°	637.5	627.3	625.9
15°	606.7	593.1	591.1
17.5°	567.8	549.3	545.9
20°	524.0	500.7	496.7
22.5°	476.1	449.4	447.4
25°	428.9	401.6	396.1
27.5°	376.3	349.5	346.8
30°	323.5	300.3	299.0
32.5°	279.1	264.8	262.0
35°	247.7	239.4	236.0
37.5°	227.2	220.9	220.3
40°	211.4	205.9	205.2
42.5°	198.3	193.6	193.0
45°	185.4	181.2	179.9
47.5°	172.4	168.3	167.6
50°	160.7	155.2	154.6
52.5°	149.8	144.4	143.0
55°	139.6	134.1	134.1
57.5°	130.7	125.2	124.5
60°	122.5	117.0	116.3
62.5°	116.3	109.4	108.8
65°	111.5	104.7	103.3
67.5°	108.8	100.5	98.5
70°	113.6	98.5	95.1
72.5°	114.2	96.5	91.7
75°	110.2	91.0	87.6
77.5°	96.5	81.5	78.0
80°	83.4	62.9	58.1
82.5°	79.4	51.3	44.5
85°	61.6	33.5	31.5
87.5°	34.9	18.4	15.0
90°	0.0	0.0	0.0

(END OF REPORT)