

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: P177431

Luminaire Tested: **VAL-F04-LED-E-U-GL2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177431
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33701)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VAL-F04-LED-E-U-GL2-8030
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8160.1 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 102.2
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

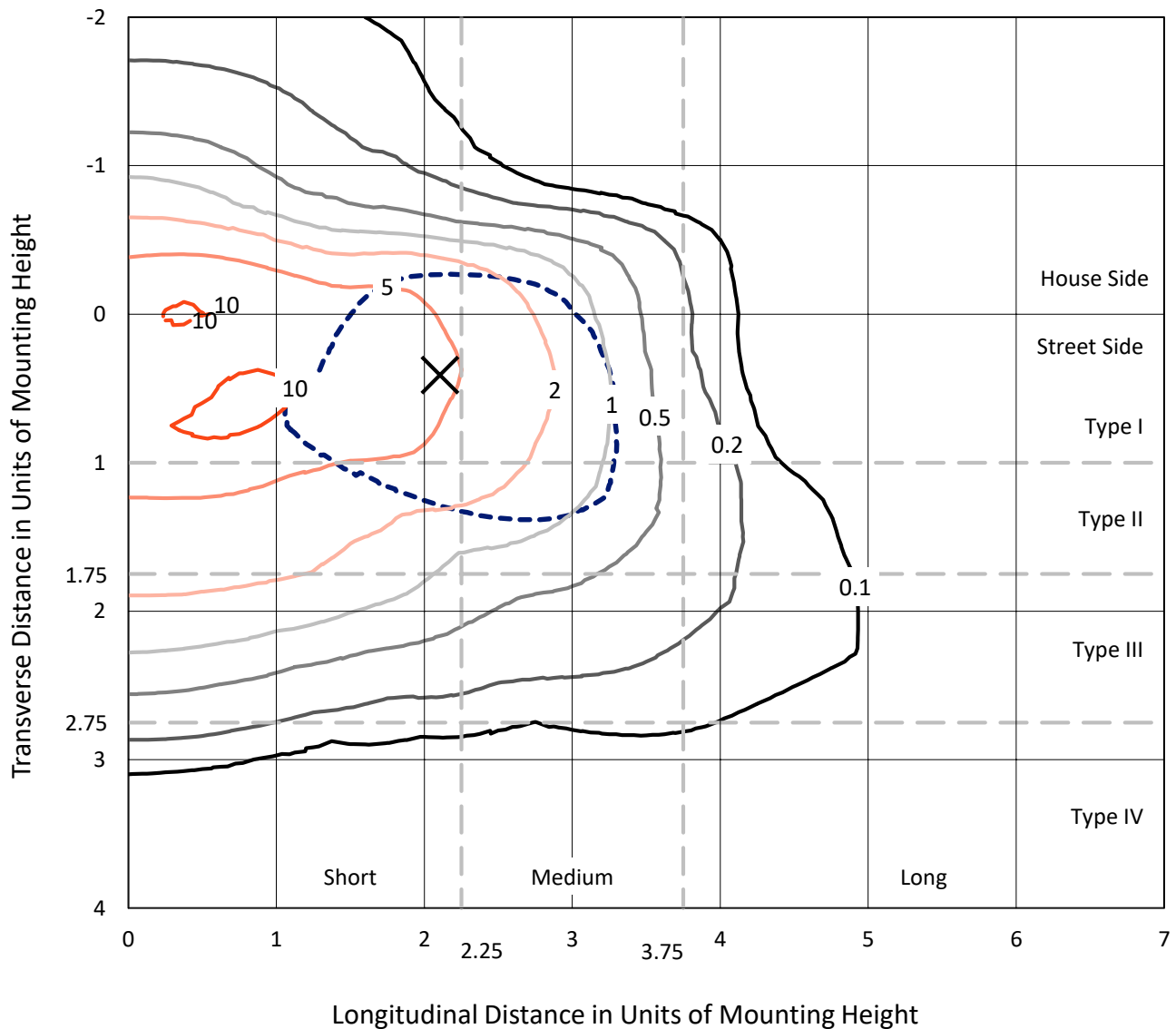


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

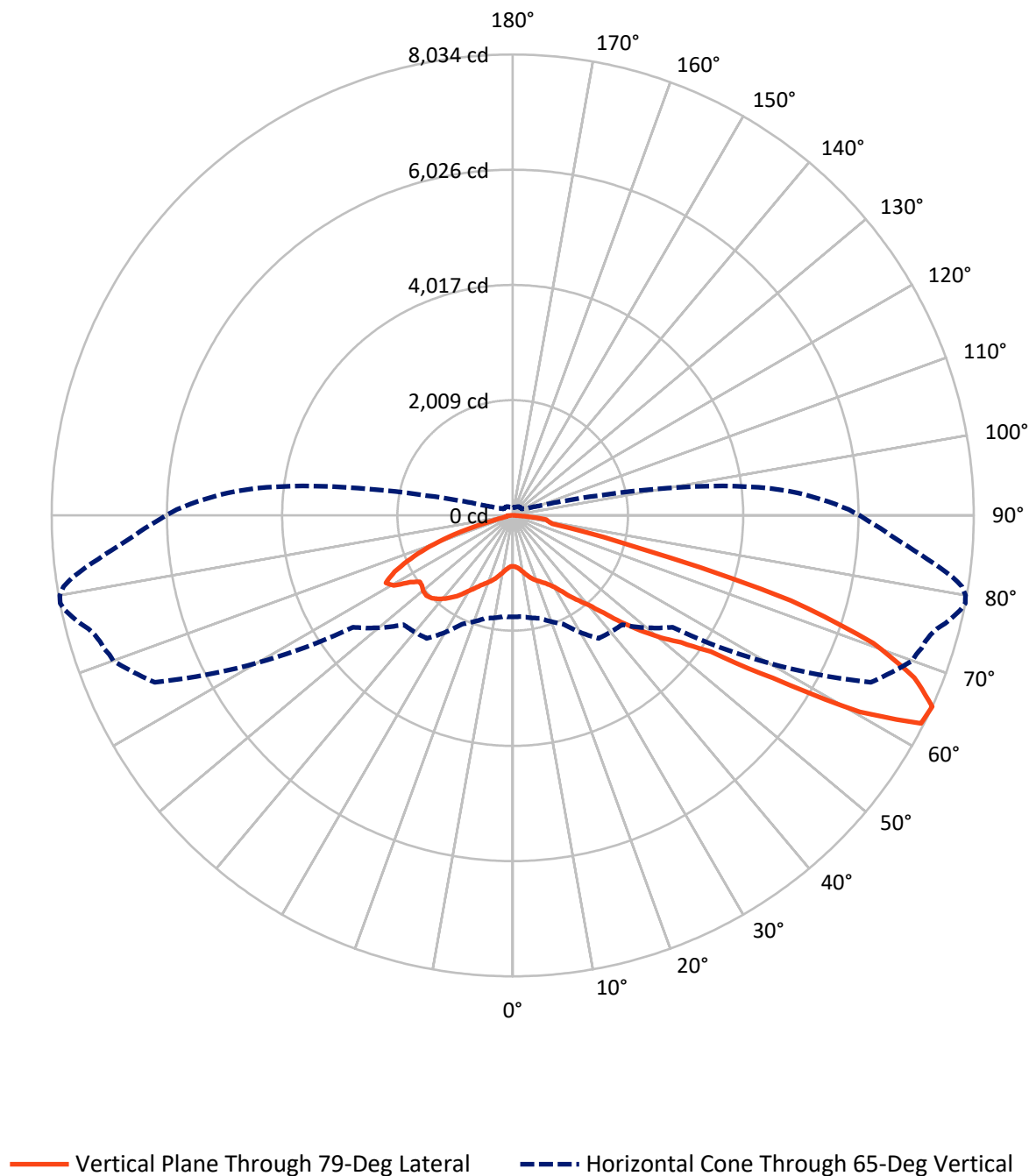


Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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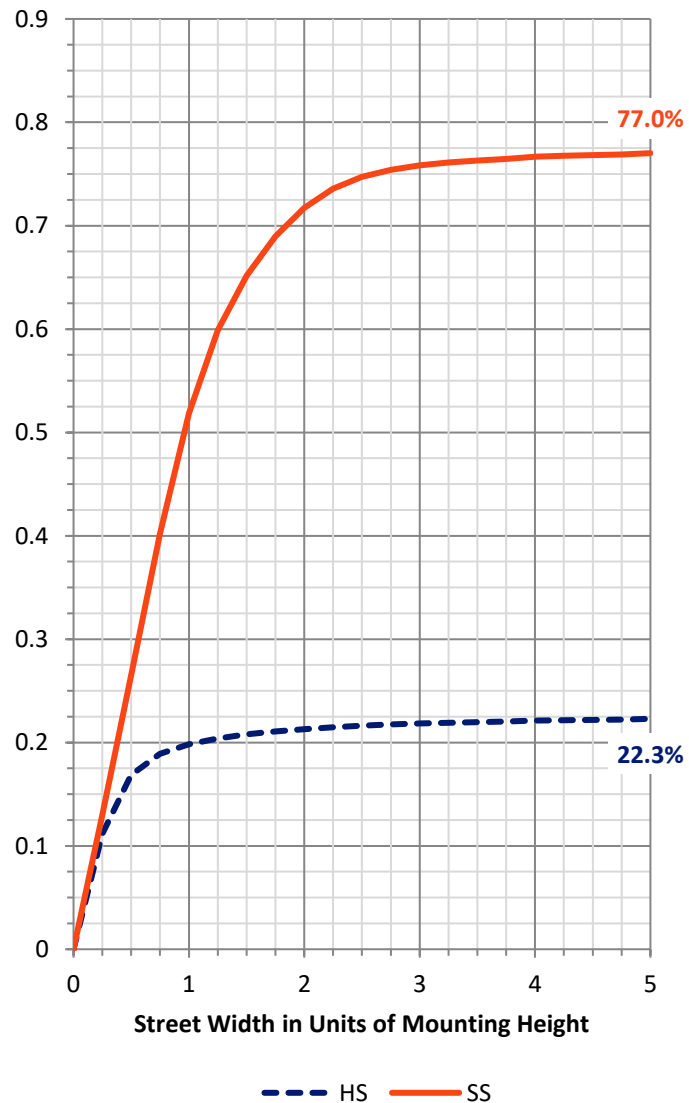
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1852.2	0.0	1852.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6307.9	0.0	6307.9
	% Fixture	77.3	0.0	77.3
Total	Lumens	8160.1	0.0	8160.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	1.1
10°-20°	286.5	3.5
20°-30°	494.0	6.1
30°-40°	805.6	9.9
40°-50°	1344.8	16.5
50°-60°	1818.5	22.3
60°-70°	2259.1	27.7
70°-80°	904.6	11.1
80°-90°	158.9	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°	8160.1	100.0
0°-180°	8160.1	100.0

Coefficient of Utilization



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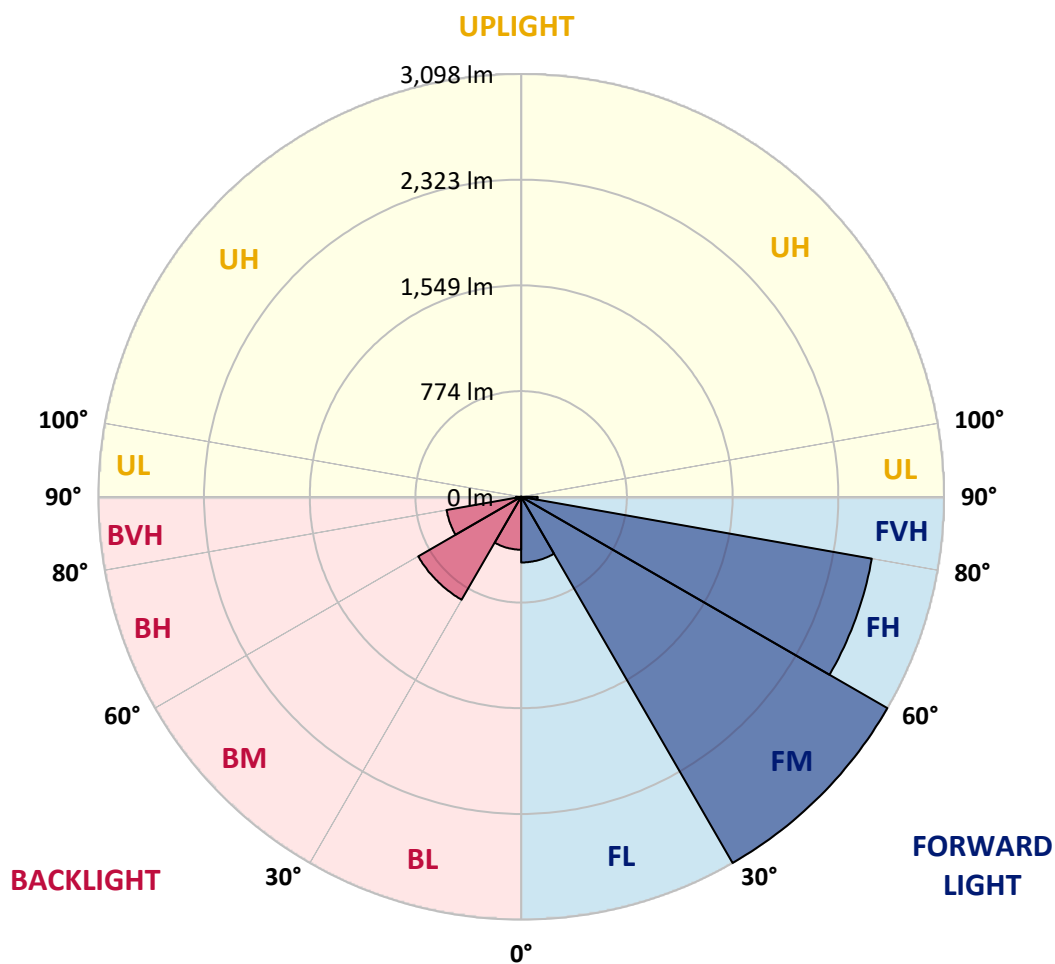
CATALOG NUMBER: VAL-F04-LED-E-U-GL2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	481.2	5.9			
FM	(30°-60°)	3097.7	38.0			
FH	(60°-80°)	2608.4	32.0			G2/5000
FVH	(80°-90°)	120.6	1.5			G2/225
BL	(0°-30°)	387.4	4.7	B1/500		
BM	(30°-60°)	871.2	10.7	B1/1000		
BH	(60°-80°)	555.3	6.8	B2/1000		G2/1000
BVH	(80°-90°)	38.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8
2.5°	893.5	892.9	895.7	898.0	898.0	899.1	898.5	895.2	895.7	896.8	895.7
5°	903.5	901.3	904.1	907.4	909.7	912.4	915.2	915.8	918.0	918.0	917.5
7.5°	925.3	923.6	927.5	928.6	933.6	938.1	943.7	947.6	949.8	950.9	952.6
10°	962.6	961.5	962.6	964.8	967.1	972.1	981.6	989.9	994.9	994.9	997.2
12.5°	1007.8	1003.3	1004.4	1000.0	1001.1	1011.7	1022.8	1036.7	1045.1	1046.2	1047.3
15°	1042.9	1040.6	1039.0	1032.8	1037.3	1051.2	1068.5	1088.6	1095.8	1102.0	1101.4
17.5°	1075.8	1073.0	1069.1	1060.7	1065.2	1087.5	1113.7	1136.0	1148.2	1149.3	1150.4
20°	1114.8	1111.4	1104.2	1086.9	1085.8	1117.0	1152.1	1176.1	1187.2	1192.3	1193.9
22.5°	1164.4	1159.9	1146.5	1113.1	1104.2	1141.0	1182.8	1212.3	1224.0	1229.0	1231.8
25°	1227.9	1219.0	1197.8	1145.4	1127.0	1165.5	1215.7	1251.3	1267.5	1272.5	1275.9
27.5°	1285.3	1278.6	1253.0	1191.1	1159.4	1198.4	1255.8	1301.5	1323.8	1329.9	1334.9
30°	1352.2	1342.7	1322.1	1256.4	1214.0	1248.6	1321.6	1379.5	1406.8	1407.4	1418.6
32.5°	1509.4	1503.3	1484.3	1411.9	1340.5	1342.7	1410.8	1490.5	1517.8	1522.2	1532.3
35°	1742.4	1740.2	1739.6	1699.5	1646.5	1591.9	1596.9	1657.7	1676.1	1683.3	1686.7
37.5°	1895.7	1915.2	1962.6	1991.5	1978.2	1989.9	1928.6	1854.4	1843.8	1836.0	1839.4
40°	2027.8	2045.1	2140.9	2274.7	2356.1	2413.5	2359.4	2132.0	2047.3	2022.8	2013.3
42.5°	2105.8	2125.3	2262.4	2476.5	2683.8	2819.8	2834.3	2518.3	2303.1	2300.3	2264.7
45°	2148.2	2167.7	2331.6	2619.7	2912.9	3158.2	3285.2	2993.7	2677.7	2654.3	2604.7
47.5°	2139.8	2158.2	2328.8	2672.7	3048.4	3382.8	3637.0	3474.2	3109.7	3053.4	2984.8
50°	2037.8	2051.2	2230.1	2586.3	3012.1	3476.4	3877.8	3915.1	3598.5	3522.1	3419.6
52.5°	1932.5	1956.4	2104.7	2433.0	2847.7	3418.5	4021.6	4316.4	4055.0	4002.6	3871.1
55°	1875.6	1894.6	2015.5	2295.9	2674.3	3220.6	4081.2	4694.9	4609.6	4588.4	4495.3
57.5°	1873.4	1891.8	1988.2	2212.8	2533.3	3014.4	4098.5	5279.6	5529.9	5535.4	5508.7
60°	1964.8	1983.7	2064.6	2253.0	2489.9	2837.7	4036.6	6109.0	6661.9	6711.0	6792.9
62.5°	1977.6	1986.5	2084.1	2338.2	2648.2	2705.6	3781.9	6799.6	7440.0	7485.2	7530.3
65°	1769.2	1768.6	1855.0	2089.1	2615.3	2692.2	3399.0	6884.3	7408.8	7436.1	7492.4
67.5°	1319.3	1308.2	1357.2	1571.3	2075.2	2695.5	2945.2	6245.0	6831.4	6883.2	6902.1
70°	680.0	697.3	730.7	861.7	1317.7	2169.9	2530.0	5269.0	5996.9	6016.5	6083.9
72.5°	279.3	272.0	294.9	362.3	659.4	1434.2	2093.0	4158.1	4953.0	4939.6	4951.8
75°	155.5	157.7	164.4	189.0	320.5	720.1	1798.1	2943.6	3368.3	3137.5	3067.9
77.5°	124.9	126.0	126.5	131.0	175.0	384.0	1380.1	1938.6	1693.9	1573.0	1526.7
80°	91.4	97.5	104.2	105.3	120.4	217.9	756.9	1632.0	1429.7	1329.4	1246.9
82.5°	73.6	76.4	90.9	93.1	95.9	129.9	342.8	1532.8	1424.1	1321.6	1207.9
85°	44.0	49.1	74.1	74.7	75.8	79.1	189.5	624.3	776.4	686.1	628.2
87.5°	15.6	20.1	36.8	30.7	39.0	32.3	83.1	209.0	257.5	244.7	216.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8
2.5°	895.2	895.2	896.3	895.7	895.7	895.7	895.7	894.6	894.6	892.9	894.1
5°	917.5	916.9	917.5	918.0	917.5	918.6	918.0	917.5	918.0	917.5	918.0
7.5°	953.1	950.3	954.2	952.0	951.5	954.8	953.1	954.8	955.4	954.8	954.2
10°	998.3	1000.0	1000.0	1000.0	998.8	1002.2	1002.7	1003.9	1004.4	1006.6	1006.6
12.5°	1050.1	1050.7	1052.9	1052.3	1053.5	1057.4	1060.2	1060.7	1061.3	1062.9	1060.7
15°	1105.9	1107.0	1107.0	1112.0	1110.3	1115.9	1117.6	1117.6	1118.1	1124.8	1125.4
17.5°	1155.5	1155.5	1159.9	1159.9	1164.4	1165.5	1170.5	1171.1	1173.3	1179.4	1180.0
20°	1197.3	1199.5	1202.3	1205.6	1207.3	1210.6	1214.0	1217.3	1220.1	1225.1	1225.7
22.5°	1236.8	1239.1	1243.5	1245.8	1249.7	1251.9	1254.7	1258.6	1263.0	1269.7	1271.4
25°	1282.6	1284.8	1289.8	1293.1	1297.6	1300.9	1306.0	1311.0	1313.8	1320.5	1325.5
27.5°	1340.5	1347.2	1353.9	1355.6	1358.9	1366.7	1373.4	1380.1	1386.2	1389.6	1395.7
30°	1425.2	1425.2	1439.2	1439.2	1445.3	1452.6	1457.0	1464.3	1475.4	1478.8	1486.6
32.5°	1538.9	1541.7	1546.8	1561.8	1573.0	1576.3	1579.6	1590.2	1596.9	1605.3	1614.8
35°	1701.1	1703.9	1706.7	1721.2	1734.0	1737.4	1740.7	1747.4	1758.6	1773.1	1768.6
37.5°	1846.6	1848.3	1857.2	1873.4	1880.6	1889.5	1892.3	1904.6	1910.7	1924.1	1924.7
40°	2021.6	2017.7	2022.8	2041.2	2052.3	2051.7	2060.7	2083.0	2087.4	2093.6	2109.2
42.5°	2265.8	2251.3	2266.9	2273.0	2289.8	2300.3	2318.2	2333.2	2343.8	2367.2	2378.4
45°	2581.3	2566.2	2579.0	2581.8	2616.4	2627.0	2653.7	2673.8	2696.6	2723.4	2731.2
47.5°	2940.8	2912.9	2897.3	2914.6	2955.8	2973.1	2999.3	3018.3	3042.2	3056.2	3051.7
50°	3357.2	3290.3	3259.1	3250.1	3279.7	3304.2	3344.9	3353.8	3365.0	3364.4	3365.0
52.5°	3821.5	3751.8	3686.6	3641.4	3637.0	3669.8	3679.9	3682.1	3678.8	3653.7	3638.1
55°	4427.9	4422.9	4354.3	4260.7	4254.5	4250.6	4192.1	4184.9	4171.5	4133.0	4080.1
57.5°	5528.2	5583.9	5538.8	5536.5	5487.5	5455.2	5347.6	5294.1	5237.8	5133.5	5050.5
60°	6800.1	6881.0	6925.6	6945.1	7040.9	7040.9	6952.9	6877.1	6785.6	6626.8	6471.8
62.5°	7566.0	7636.8	7702.6	7805.7	7927.7	7981.8	7986.3	7918.8	7803.4	7622.3	7403.2
65°	7517.5	7569.9	7649.6	7771.1	7872.0	7969.0	8034.2	8013.6	7925.5	7744.4	7505.8
67.5°	6968.5	7044.8	7147.9	7260.0	7353.6	7445.0	7550.4	7558.2	7534.8	7362.5	7146.8
70°	6121.2	6219.3	6284.6	6425.6	6467.9	6560.5	6666.4	6717.1	6679.2	6546.5	6420.0
72.5°	4973.0	5050.5	5061.6	5000.3	5021.5	5044.4	5070.0	4951.3	4905.6	4728.3	4646.9
75°	3015.5	2913.5	2827.6	2742.4	2487.6	2397.3	2258.5	1984.9	1953.6	1765.8	1635.4
77.5°	1434.2	1391.2	1313.8	1183.9	1011.1	845.6	701.8	570.2	521.2	429.2	365.6
80°	1200.6	1149.3	1079.7	983.2	862.3	741.9	628.2	530.6	432.5	352.3	281.5
82.5°	1101.4	1012.2	914.1	831.1	745.8	663.8	587.5	499.4	447.6	361.2	294.9
85°	556.8	487.7	395.2	332.8	280.9	228.5	197.9	168.9	150.5	119.8	104.2
87.5°	186.7	152.7	113.7	96.4	87.0	74.7	68.6	65.2	63.5	56.3	50.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8
2.5°	894.1	894.1	894.1	894.1	893.5	893.5	893.5	893.5	893.5	893.5	894.1
5°	916.9	916.9	917.5	919.1	915.8	916.9	918.0	916.3	918.0	916.3	918.6
7.5°	953.7	955.4	954.2	956.5	955.4	958.7	956.5	954.8	955.9	955.9	956.5
10°	1005.5	1007.8	1006.1	1007.2	1007.2	1009.4	1006.6	1007.2	1007.8	1006.6	1007.2
12.5°	1062.9	1064.1	1063.5	1066.8	1065.2	1066.8	1065.2	1067.4	1068.5	1069.6	1069.6
15°	1125.4	1126.5	1129.8	1129.3	1132.6	1131.5	1132.1	1129.3	1134.8	1131.5	1132.6
17.5°	1182.8	1182.2	1186.7	1188.4	1188.9	1189.5	1191.1	1188.9	1189.5	1191.1	1190.0
20°	1227.4	1231.3	1232.4	1236.8	1240.2	1241.3	1240.7	1242.4	1244.6	1242.4	1242.4
22.5°	1274.7	1280.3	1282.0	1284.8	1288.1	1288.7	1292.0	1293.7	1294.8	1294.3	1294.8
25°	1331.6	1335.5	1339.4	1345.0	1348.9	1349.4	1352.2	1354.5	1355.0	1354.5	1357.8
27.5°	1401.3	1406.3	1411.3	1418.0	1422.5	1423.6	1429.7	1429.7	1433.0	1434.7	1435.8
30°	1491.0	1492.7	1505.5	1512.2	1510.5	1518.3	1526.7	1526.1	1530.0	1531.1	1533.9
32.5°	1621.4	1621.4	1632.6	1641.0	1649.9	1647.1	1659.9	1657.7	1663.8	1667.1	1665.5
35°	1779.7	1785.3	1793.7	1798.7	1808.2	1813.2	1822.1	1827.1	1829.9	1829.3	1823.2
37.5°	1943.1	1952.0	1955.3	1967.6	1977.1	1985.4	1986.5	1981.0	1983.2	1972.0	1968.7
40°	2129.8	2142.6	2150.4	2168.8	2167.7	2178.3	2179.4	2163.2	2160.4	2145.9	2130.9
42.5°	2390.6	2408.5	2414.6	2428.5	2417.4	2422.4	2394.5	2387.9	2365.6	2342.1	2308.1
45°	2742.4	2733.4	2737.3	2733.4	2703.9	2682.2	2659.3	2626.4	2593.5	2548.4	2499.9
47.5°	3051.7	3056.2	3027.2	3008.8	2960.8	2930.2	2888.4	2831.0	2790.8	2730.1	2666.0
50°	3352.1	3302.5	3261.8	3219.5	3177.1	3120.8	3057.8	3007.1	2948.6	2872.8	2794.2
52.5°	3596.3	3532.2	3483.1	3422.9	3365.5	3303.1	3237.3	3163.7	3086.8	3011.0	2914.0
55°	4028.8	3935.7	3872.7	3767.4	3702.2	3614.7	3563.4	3468.1	3361.1	3260.7	3157.6
57.5°	4956.9	4817.5	4745.6	4686.0	4584.5	4440.7	4349.3	4192.7	4040.0	3932.9	3761.3
60°	6354.8	6213.2	6093.9	5952.9	5797.4	5602.3	5515.4	5330.9	5112.4	4935.7	4708.8
62.5°	7226.0	7030.3	6836.9	6639.1	6483.0	6330.3	6150.2	5964.1	5747.8	5507.6	5259.5
65°	7261.1	7026.4	6795.1	6593.3	6410.5	6212.1	6043.2	5854.3	5626.8	5379.4	5121.8
67.5°	6896.6	6634.0	6386.0	6164.7	5955.7	5771.8	5595.1	5417.3	5173.7	4966.3	4702.7
70°	6170.3	5930.6	5706.0	5454.0	5294.1	5087.3	4915.1	4727.8	4553.3	4359.3	4112.4
72.5°	4532.1	4351.5	4095.1	3988.1	3902.3	3683.2	3555.0	3539.4	3427.9	3195.5	3011.0
75°	1685.5	1434.7	1358.9	1404.1	1328.8	1353.9	1344.4	1290.9	1293.1	1253.6	1206.7
77.5°	330.0	306.6	288.2	293.2	272.6	263.6	282.6	277.0	267.0	269.8	265.3
80°	224.6	190.1	172.2	165.5	157.2	153.3	152.2	150.5	147.2	145.5	140.5
82.5°	221.3	164.4	129.9	111.5	104.8	101.4	98.7	98.1	97.0	96.4	98.1
85°	88.1	71.3	65.2	59.6	58.0	56.3	56.3	55.7	55.2	56.3	58.5
87.5°	42.9	36.2	32.9	30.1	29.0	28.4	28.4	29.0	29.5	31.8	36.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: VAL-F04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8
2.5°	892.9	893.5	892.4	892.9	892.4	891.3	890.7	892.4	891.8	891.3	891.3
5°	915.8	918.0	916.9	915.8	915.8	915.2	915.2	915.2	914.7	915.2	913.6
7.5°	955.4	954.8	954.8	953.7	952.6	953.7	953.1	951.5	952.0	950.9	949.2
10°	1006.1	1004.4	1007.2	1007.2	1005.0	1004.4	1003.3	1001.6	1001.6	1000.0	1000.0
12.5°	1066.3	1064.6	1068.5	1065.7	1062.4	1061.8	1058.5	1057.4	1059.0	1058.5	1057.4
15°	1127.6	1128.2	1129.8	1129.3	1125.4	1125.4	1120.9	1121.5	1118.1	1117.0	1114.2
17.5°	1187.2	1187.8	1186.1	1186.1	1183.3	1181.7	1176.6	1177.2	1175.0	1170.5	1167.2
20°	1240.7	1240.2	1236.3	1239.6	1234.1	1232.9	1228.5	1224.0	1225.1	1220.7	1214.0
22.5°	1293.1	1292.0	1290.9	1289.2	1286.5	1285.3	1280.3	1279.8	1274.2	1267.5	1261.9
25°	1353.9	1353.3	1351.7	1352.2	1346.7	1347.2	1338.3	1336.1	1332.7	1325.5	1321.0
27.5°	1432.5	1432.5	1428.0	1426.4	1424.7	1422.5	1414.7	1409.1	1400.7	1392.4	1383.4
30°	1528.9	1527.8	1526.7	1522.2	1516.1	1512.8	1498.8	1489.9	1478.8	1463.1	1449.8
32.5°	1666.6	1657.1	1649.3	1639.3	1629.2	1618.7	1596.9	1581.9	1564.0	1538.9	1517.8
35°	1819.9	1803.7	1795.3	1774.7	1755.8	1734.6	1708.4	1677.7	1653.2	1620.3	1585.8
37.5°	1946.4	1934.1	1911.8	1888.4	1861.7	1821.5	1792.0	1759.1	1716.2	1680.0	1638.2
40°	2102.5	2074.6	2042.8	2003.8	1967.0	1921.9	1881.2	1833.8	1781.4	1729.0	1674.4
42.5°	2266.3	2223.4	2171.0	2125.9	2070.1	2011.1	1958.1	1894.0	1827.1	1756.9	1683.9
45°	2433.6	2380.6	2310.9	2246.8	2169.4	2095.2	2019.4	1931.9	1840.5	1746.9	1654.9
47.5°	2586.8	2509.4	2430.2	2343.8	2254.6	2159.3	2051.7	1936.9	1816.5	1693.3	1578.5
50°	2707.2	2610.3	2510.5	2410.7	2301.5	2177.7	2042.3	1892.3	1744.1	1596.4	1464.3
52.5°	2813.7	2705.0	2582.4	2458.6	2323.8	2171.6	2002.1	1825.4	1644.9	1481.5	1333.3
55°	3019.9	2883.4	2721.7	2562.3	2391.8	2200.0	1988.8	1772.5	1564.6	1386.8	1229.0
57.5°	3580.1	3395.6	3145.3	2924.1	2707.8	2428.5	2130.9	1864.5	1599.7	1389.6	1214.0
60°	4462.5	4162.0	3875.5	3538.3	3188.3	2805.3	2406.2	2047.3	1724.6	1460.9	1249.7
62.5°	4974.1	4657.0	4288.5	3880.0	3426.3	2959.7	2501.6	2082.4	1728.5	1441.4	1207.3
65°	4835.9	4517.1	4111.9	3693.8	3211.1	2734.0	2279.2	1876.7	1533.4	1268.1	1044.0
67.5°	4425.7	4092.3	3711.6	3247.9	2786.4	2344.4	1929.7	1550.7	1246.9	999.4	801.5
70°	3828.7	3532.2	3165.4	2737.9	2290.3	1892.9	1543.4	1201.7	944.8	717.9	561.8
72.5°	2841.6	2579.0	2349.9	1992.7	1664.9	1353.3	1068.5	836.1	614.8	464.9	357.8
75°	1192.8	1104.2	1066.8	935.9	813.8	667.2	502.2	400.2	324.4	275.9	219.1
77.5°	289.3	289.3	272.0	254.7	234.1	211.8	187.3	167.2	157.2	148.3	141.0
80°	140.5	139.3	134.9	134.3	130.4	125.4	122.6	118.7	117.1	114.8	113.7
82.5°	98.7	98.1	96.4	98.7	98.1	100.3	101.4	102.0	102.0	102.6	103.1
85°	62.4	64.7	69.1	74.7	79.7	85.8	91.4	95.9	99.2	102.0	104.2
87.5°	39.6	45.1	48.5	56.9	65.2	74.7	85.3	89.7	93.6	94.2	90.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: VAL-F04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8	886.8
2.5°	891.3	890.7	891.8	890.7	890.7	890.1	888.5	886.8	885.1	884.6	882.9
5°	913.0	913.0	914.1	911.9	912.4	910.2	905.2	899.6	894.6	890.1	885.1
7.5°	949.8	948.1	948.7	948.1	947.0	942.5	931.4	917.5	904.1	890.1	879.0
10°	998.8	995.5	995.5	994.4	992.7	986.6	963.2	935.3	907.4	882.3	864.0
12.5°	1053.5	1054.0	1049.6	1046.8	1044.0	1031.2	996.1	951.5	907.4	867.3	837.8
15°	1110.3	1109.8	1104.7	1103.1	1096.9	1078.0	1025.0	959.8	896.8	837.8	793.7
17.5°	1161.6	1159.4	1154.4	1151.0	1144.3	1119.2	1044.5	955.9	869.0	791.5	736.3
20°	1208.4	1205.6	1201.2	1195.0	1188.4	1152.1	1051.8	935.9	824.9	736.3	680.6
22.5°	1256.9	1250.8	1245.8	1237.4	1230.2	1181.7	1046.8	900.2	774.8	675.0	615.4
25°	1311.0	1303.7	1293.1	1283.1	1272.0	1205.6	1032.8	855.6	714.6	608.7	548.5
27.5°	1369.5	1358.9	1345.0	1332.2	1314.3	1223.5	1008.9	806.0	648.8	542.9	480.5
30°	1431.4	1411.9	1394.6	1375.1	1352.2	1231.8	974.3	744.7	576.3	476.0	413.6
32.5°	1491.6	1465.4	1439.7	1411.3	1380.1	1228.5	925.3	672.2	503.9	413.6	361.2
35°	1552.9	1515.0	1479.3	1440.8	1402.9	1211.8	857.8	591.9	435.3	361.7	323.8
37.5°	1594.7	1547.3	1499.9	1453.7	1408.0	1175.5	768.1	502.2	373.5	324.4	297.1
40°	1615.9	1557.9	1499.9	1442.5	1386.2	1115.3	663.3	420.3	329.4	296.5	277.0
42.5°	1609.7	1537.8	1465.9	1397.9	1328.8	1019.5	549.6	352.8	298.8	274.8	257.5
45°	1559.0	1473.2	1391.2	1319.3	1232.9	896.3	451.5	311.0	275.3	257.0	240.8
47.5°	1463.7	1367.8	1267.5	1186.1	1105.3	753.6	375.7	284.8	254.7	239.7	223.5
50°	1342.2	1231.3	1130.9	1042.9	963.7	620.4	323.8	262.5	238.0	225.2	207.9
52.5°	1208.4	1089.1	997.7	905.2	827.7	517.8	287.6	238.0	221.8	208.5	194.5
55°	1097.5	987.1	894.1	801.0	722.9	453.2	257.5	219.1	206.8	192.9	181.7
57.5°	1068.0	942.0	840.5	752.5	672.2	413.6	235.8	201.8	193.4	182.8	170.6
60°	1080.2	941.4	827.7	731.3	647.1	381.8	219.6	190.1	183.4	173.9	161.1
62.5°	1036.2	889.6	774.8	672.2	592.5	341.7	207.9	184.5	180.0	167.2	152.7
65°	882.9	748.6	638.2	549.6	481.0	287.6	198.4	189.5	185.1	162.8	147.2
67.5°	672.2	560.2	471.6	405.2	355.6	238.0	196.2	206.2	197.3	165.0	145.5
70°	464.9	380.1	323.3	283.2	251.9	200.7	203.4	224.6	211.8	172.2	155.0
72.5°	294.9	246.4	218.5	203.4	188.4	169.4	201.8	222.4	205.1	173.3	155.0
75°	189.0	168.9	159.4	153.8	149.4	147.7	177.8	182.8	165.0	150.5	144.4
77.5°	133.8	130.4	128.8	128.2	128.8	132.7	147.2	137.7	119.8	120.4	123.7
80°	113.1	113.1	112.0	112.6	113.7	115.4	117.6	101.4	92.0	99.2	110.4
82.5°	103.7	105.3	106.5	107.6	109.2	107.0	99.8	76.9	74.1	96.4	108.1
85°	105.3	105.3	105.9	107.0	107.6	96.4	83.1	58.0	56.9	108.1	102.0
87.5°	90.3	89.2	85.3	82.5	78.6	66.3	55.2	32.3	33.4	66.9	71.3
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: P177431

CATALOG NUMBER: VAL-F04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	886.8	886.8
2.5°	882.3	882.3
5°	882.3	882.3
7.5°	875.1	872.9
10°	853.9	851.1
12.5°	821.6	818.8
15°	772.0	768.6
17.5°	710.1	704.5
20°	645.5	637.7
22.5°	580.8	574.7
25°	514.5	508.9
27.5°	449.3	443.7
30°	389.1	386.8
32.5°	344.5	342.2
35°	311.6	310.5
37.5°	289.3	288.2
40°	269.8	268.7
42.5°	251.9	250.3
45°	234.1	234.7
47.5°	216.3	215.7
50°	200.7	200.7
52.5°	187.8	187.3
55°	176.1	175.6
57.5°	164.4	163.9
60°	154.4	152.7
62.5°	144.9	143.8
65°	138.8	138.2
67.5°	134.3	132.7
70°	133.2	128.8
72.5°	129.9	124.3
75°	122.1	119.3
77.5°	107.6	104.2
80°	83.1	76.9
82.5°	69.7	60.2
85°	51.3	47.4
87.5°	37.3	29.5
90°	0.0	0.0

(END OF REPORT)