

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: P177432

Luminaire Tested: **VAL-F04-LED-E-U-GL2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177432
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-GL2-7030
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8830.7 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-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



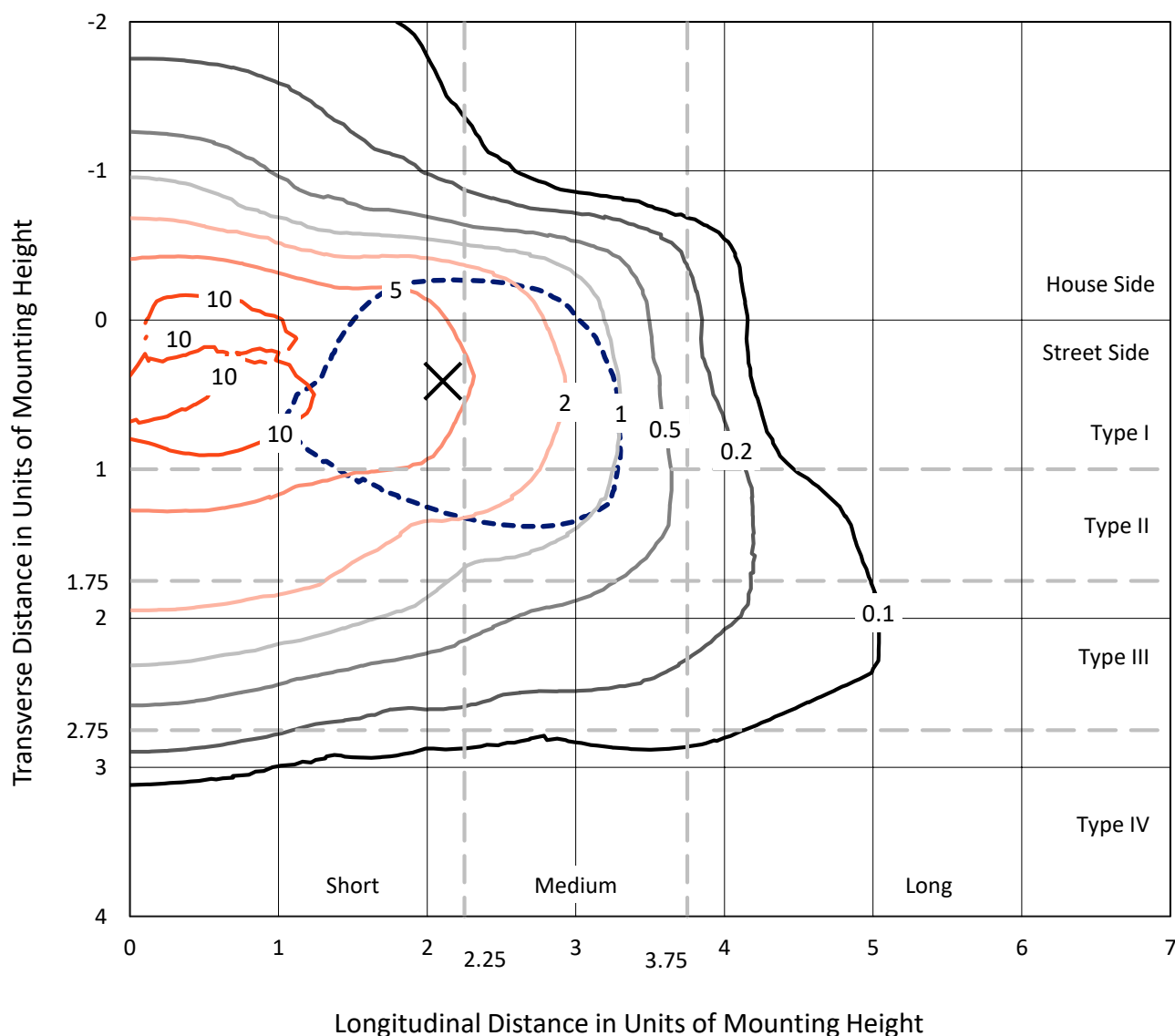
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

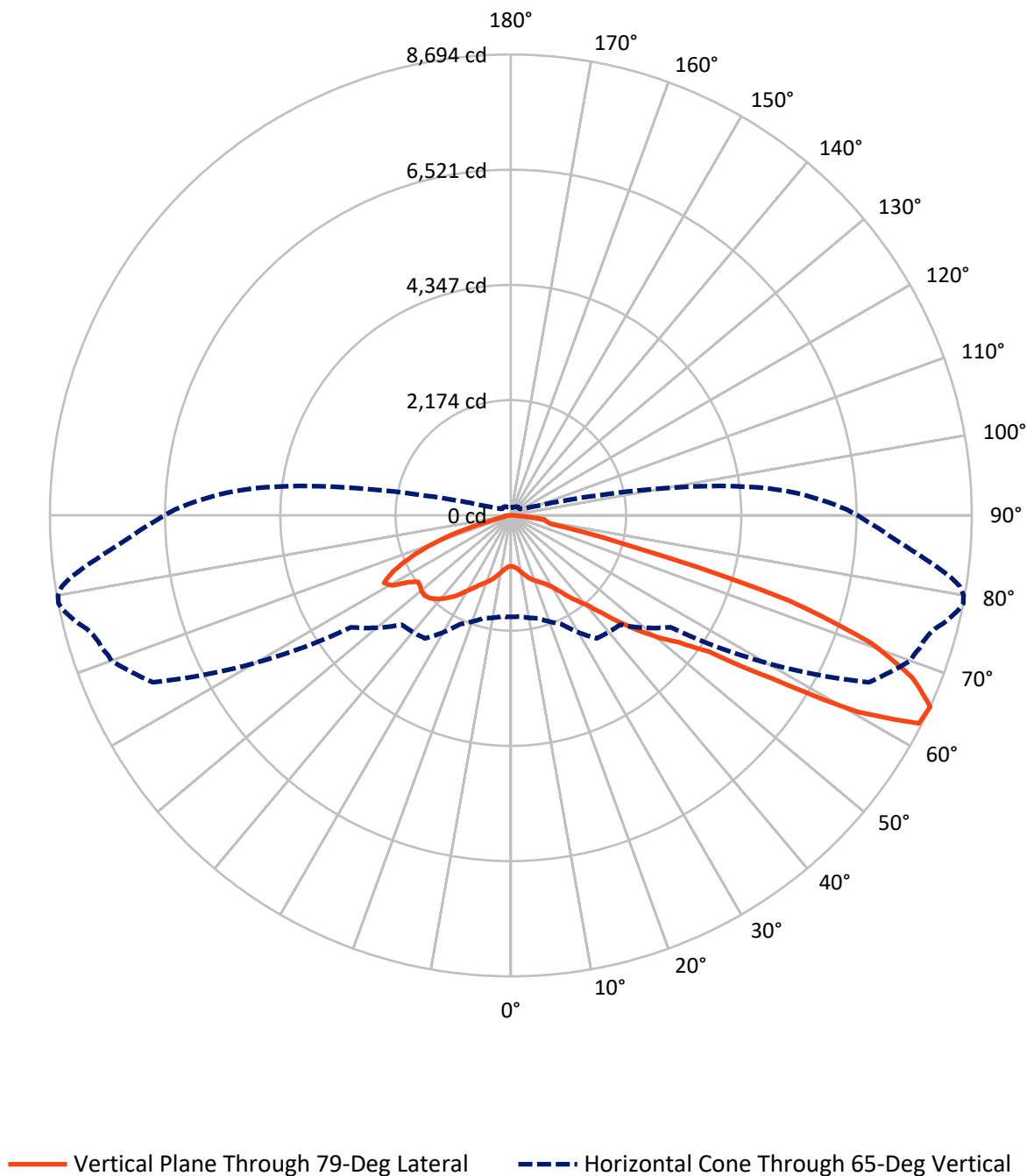


Based on 10 foot mounting height. Maximum calculated value = 12.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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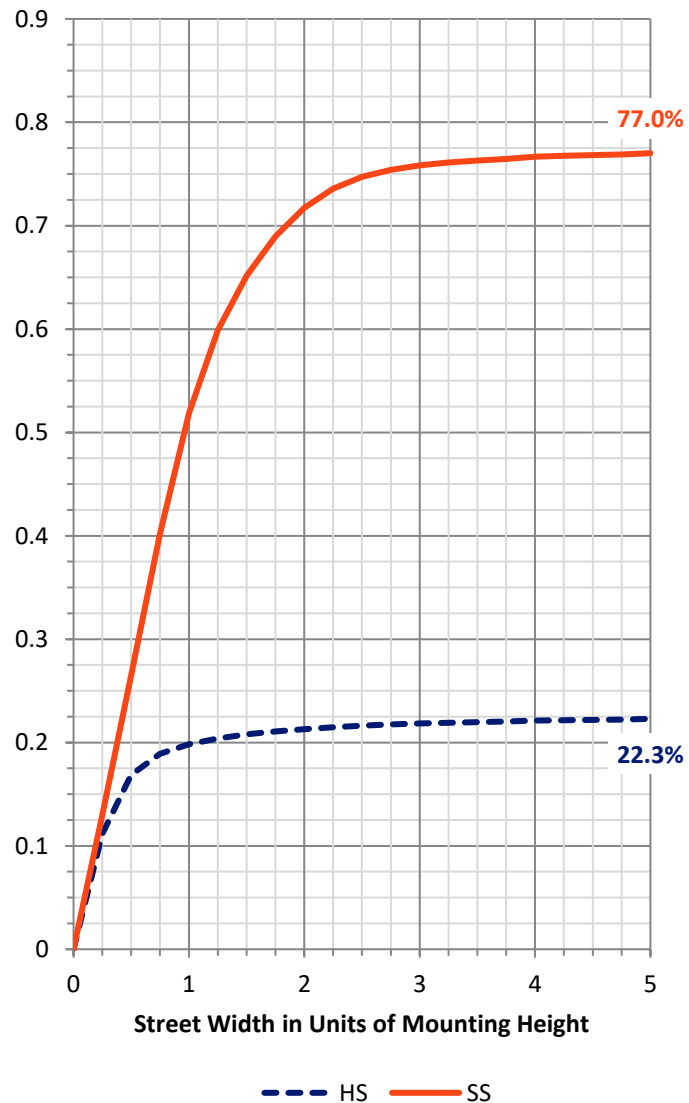
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2004.5	0.0	2004.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6826.2	0.0	6826.2
	% Fixture	77.3	0.0	77.3
Total	Lumens	8830.7	0.0	8830.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	1.1
10°-20°	310.1	3.5
20°-30°	534.6	6.1
30°-40°	871.8	9.9
40°-50°	1455.4	16.5
50°-60°	1967.9	22.3
60°-70°	2444.7	27.7
70°-80°	979.0	11.1
80°-90°	172.0	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°	8830.7	100.0
0°-180°	8830.7	100.0

Coefficient of Utilization



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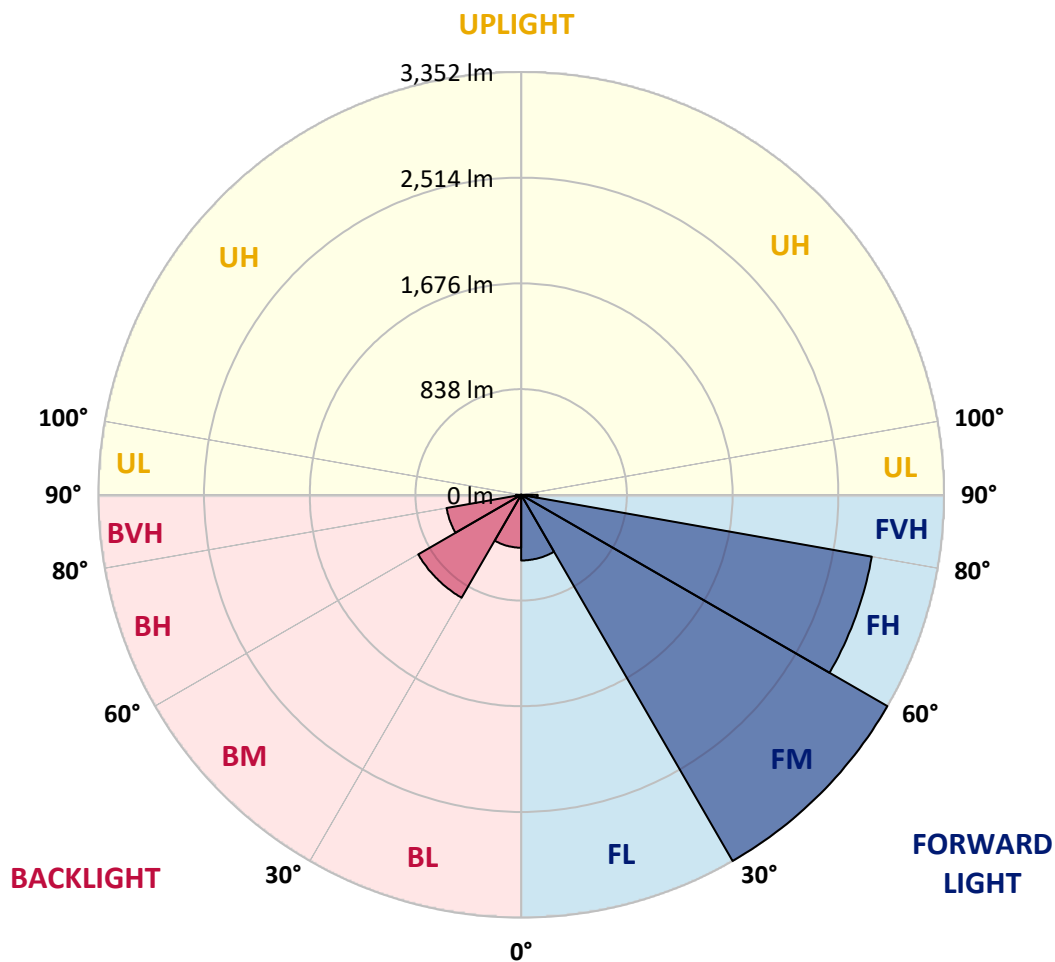
CATALOG NUMBER: VAL-F04-LED-E-U-GL2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	520.7	5.9			
FM	(30°-60°)	3352.3	38.0			
FH	(60°-80°)	2822.8	32.0			G2/5000
FVH	(80°-90°)	130.5	1.5			G2/225
BL	(0°-30°)	419.2	4.7	B1/500		
BM	(30°-60°)	942.8	10.7	B1/1000		
BH	(60°-80°)	600.9	6.8	B2/1000		G2/1000
BVH	(80°-90°)	41.5	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°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	966.9	966.3	969.3	971.7	971.7	973.0	972.3	968.7	969.3	970.5	969.3
5°	977.8	975.4	978.4	982.0	984.4	987.4	990.4	991.0	993.5	993.5	992.9
7.5°	1001.3	999.5	1003.7	1004.9	1010.4	1015.2	1021.2	1025.4	1027.8	1029.1	1030.9
10°	1041.7	1040.5	1041.7	1044.1	1046.5	1052.0	1062.2	1071.3	1076.7	1076.7	1079.1
12.5°	1090.6	1085.8	1087.0	1082.1	1083.3	1094.8	1106.9	1121.9	1131.0	1132.2	1133.4
15°	1128.6	1126.2	1124.4	1117.7	1122.5	1137.6	1156.3	1178.0	1185.9	1192.5	1191.9
17.5°	1164.2	1161.1	1156.9	1147.9	1152.7	1176.8	1205.2	1229.3	1242.6	1243.8	1245.0
20°	1206.4	1202.8	1194.9	1176.2	1175.0	1208.8	1246.8	1272.7	1284.8	1290.2	1292.0
22.5°	1260.1	1255.2	1240.8	1204.6	1194.9	1234.7	1280.0	1311.9	1324.6	1330.0	1333.1
25°	1328.8	1319.2	1296.3	1239.6	1219.7	1261.3	1315.6	1354.2	1371.7	1377.1	1380.7
27.5°	1391.0	1383.7	1356.0	1289.0	1254.6	1296.9	1359.0	1408.5	1432.6	1439.2	1444.7
30°	1463.4	1453.1	1430.8	1359.6	1313.8	1351.2	1430.2	1492.9	1522.5	1523.1	1535.1
32.5°	1633.5	1626.8	1606.3	1527.9	1450.7	1453.1	1526.7	1612.9	1642.5	1647.3	1658.2
35°	1885.6	1883.2	1882.6	1839.1	1781.8	1722.7	1728.2	1793.9	1813.8	1821.6	1825.3
37.5°	2051.5	2072.6	2123.8	2155.2	2140.7	2153.4	2087.1	2006.8	1995.4	1986.9	1990.5
40°	2194.4	2213.1	2316.9	2461.6	2549.7	2611.8	2553.3	2307.2	2215.5	2189.0	2178.7
42.5°	2278.9	2300.0	2448.4	2680.0	2904.4	3051.6	3067.2	2725.2	2492.4	2489.4	2450.8
45°	2324.7	2345.8	2523.2	2835.0	3152.3	3417.7	3555.2	3239.8	2897.7	2872.4	2818.7
47.5°	2315.7	2335.6	2520.1	2892.3	3298.9	3660.8	3935.8	3759.7	3365.2	3304.3	3230.1
50°	2205.3	2219.8	2413.4	2798.8	3259.7	3762.1	4196.4	4236.8	3894.2	3811.6	3700.6
52.5°	2091.3	2117.2	2277.7	2632.9	3081.7	3699.4	4352.1	4671.1	4388.2	4331.5	4189.2
55°	2029.8	2050.3	2181.2	2484.6	2894.1	3485.3	4416.6	5080.7	4988.4	4965.5	4864.8
57.5°	2027.3	2047.2	2151.6	2394.7	2741.5	3262.1	4435.3	5713.5	5984.3	5990.3	5961.4
60°	2126.3	2146.8	2234.2	2438.1	2694.5	3070.9	4368.3	6611.0	7209.4	7262.5	7351.1
62.5°	2140.1	2149.8	2255.3	2530.4	2865.8	2927.9	4092.7	7358.4	8051.4	8100.3	8149.2
65°	1914.5	1913.9	2007.4	2260.8	2830.2	2913.4	3678.3	7450.1	8017.7	8047.2	8108.1
67.5°	1427.8	1415.7	1468.8	1700.4	2245.7	2917.0	3187.3	6758.2	7392.8	7448.9	7469.4
70°	735.9	754.6	790.8	932.5	1426.0	2348.2	2737.9	5702.0	6489.8	6510.9	6583.9
72.5°	302.2	294.4	319.1	392.1	713.6	1552.0	2265.0	4499.8	5360.0	5345.5	5358.8
75°	168.3	170.7	177.9	204.5	346.8	779.3	1945.9	3185.5	3645.1	3395.4	3320.0
77.5°	135.1	136.3	136.9	141.8	189.4	415.6	1493.5	2097.9	1833.1	1702.2	1652.2
80°	98.9	105.6	112.8	114.0	130.3	235.8	819.1	1766.2	1547.2	1438.6	1349.3
82.5°	79.6	82.6	98.3	100.7	103.7	140.5	371.0	1658.8	1541.2	1430.2	1307.1
85°	47.7	53.1	80.2	80.8	82.0	85.7	205.1	675.6	840.3	742.5	679.8
87.5°	16.9	21.7	39.8	33.2	42.2	35.0	89.9	226.2	278.7	264.8	234.6
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°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	968.7	968.7	969.9	969.3	969.3	969.3	969.3	968.1	968.1	966.3	967.5
5°	992.9	992.3	992.9	993.5	992.9	994.1	993.5	992.9	993.5	992.9	993.5
7.5°	1031.5	1028.4	1032.7	1030.3	1029.7	1033.3	1031.5	1033.3	1033.9	1033.3	1032.7
10°	1080.3	1082.1	1082.1	1082.1	1080.9	1084.5	1085.1	1086.4	1087.0	1089.4	1089.4
12.5°	1136.4	1137.0	1139.4	1138.8	1140.0	1144.3	1147.3	1147.9	1148.5	1150.3	1147.9
15°	1196.7	1197.9	1197.9	1203.4	1201.6	1207.6	1209.4	1209.4	1210.0	1217.2	1217.9
17.5°	1250.4	1250.4	1255.2	1255.2	1260.1	1261.3	1266.7	1267.3	1269.7	1276.4	1277.0
20°	1295.7	1298.1	1301.1	1304.7	1306.5	1310.1	1313.8	1317.4	1320.4	1325.8	1326.4
22.5°	1338.5	1340.9	1345.7	1348.1	1352.4	1354.8	1357.8	1362.0	1366.8	1374.1	1375.9
25°	1388.0	1390.4	1395.8	1399.4	1404.2	1407.9	1413.3	1418.7	1421.7	1429.0	1434.4
27.5°	1450.7	1457.9	1465.2	1467.0	1470.6	1479.0	1486.3	1493.5	1500.1	1503.8	1510.4
30°	1542.4	1542.4	1557.4	1557.4	1564.1	1571.9	1576.8	1584.6	1596.7	1600.3	1608.7
32.5°	1665.4	1668.4	1673.9	1690.2	1702.2	1705.8	1709.5	1720.9	1728.2	1737.2	1747.5
35°	1841.0	1844.0	1847.0	1862.7	1876.5	1880.2	1883.8	1891.0	1903.1	1918.8	1913.9
37.5°	1998.4	2000.2	2009.8	2027.3	2035.2	2044.8	2047.8	2061.1	2067.8	2082.2	2082.8
40°	2187.8	2183.6	2189.0	2208.9	2221.0	2220.4	2230.0	2254.1	2259.0	2265.6	2282.5
42.5°	2452.0	2436.3	2453.2	2459.8	2477.9	2489.4	2508.7	2525.0	2536.4	2561.8	2573.8
45°	2793.4	2777.1	2791.0	2794.0	2831.4	2842.9	2871.8	2893.5	2918.3	2947.2	2955.7
47.5°	3182.5	3152.3	3135.4	3154.1	3198.7	3217.4	3245.8	3266.3	3292.2	3307.3	3302.5
50°	3633.0	3560.7	3526.9	3517.2	3549.2	3575.7	3619.8	3629.4	3641.5	3640.9	3641.5
52.5°	4135.5	4060.1	3989.5	3940.7	3935.8	3971.4	3982.3	3984.7	3981.1	3953.9	3937.1
55°	4791.8	4786.4	4712.2	4610.8	4604.2	4600.0	4536.6	4528.8	4514.3	4472.7	4415.4
57.5°	5982.5	6042.8	5993.9	5991.5	5938.5	5903.5	5787.1	5729.1	5668.2	5555.4	5465.5
60°	7359.0	7446.4	7494.7	7515.8	7619.6	7619.6	7524.3	7442.2	7343.3	7171.4	7003.7
62.5°	8187.8	8264.4	8335.5	8447.1	8579.2	8637.7	8642.6	8569.6	8444.7	8248.7	8011.6
65°	8135.3	8192.0	8278.2	8409.7	8518.9	8623.9	8694.4	8672.1	8576.8	8380.8	8122.6
67.5°	7541.1	7623.8	7735.4	7856.6	7957.9	8056.9	8170.9	8179.3	8154.0	7967.6	7734.2
70°	6624.3	6730.4	6801.0	6953.6	6999.5	7099.6	7214.2	7269.1	7228.1	7084.5	6947.6
72.5°	5381.7	5465.5	5477.6	5411.3	5434.2	5458.9	5486.7	5358.2	5308.7	5116.9	5028.8
75°	3263.3	3152.9	3060.0	2967.7	2692.1	2594.3	2444.1	2148.0	2114.2	1910.9	1769.8
77.5°	1552.0	1505.6	1421.7	1281.2	1094.2	915.0	759.4	617.1	564.0	464.5	395.7
80°	1299.3	1243.8	1168.4	1064.0	933.1	802.9	679.8	574.2	468.1	381.2	304.6
82.5°	1191.9	1095.4	989.2	899.4	807.1	718.4	635.8	540.5	484.4	390.9	319.1
85°	602.6	527.8	427.7	360.1	304.0	247.3	214.1	182.8	162.9	129.7	112.8
87.5°	202.1	165.3	123.1	104.4	94.1	80.8	74.2	70.6	68.8	60.9	54.3
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°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	967.5	967.5	967.5	967.5	966.9	966.9	966.9	966.9	966.9	966.9	967.5
5°	992.3	992.3	992.9	994.7	991.0	992.3	993.5	991.7	993.5	991.7	994.1
7.5°	1032.1	1033.9	1032.7	1035.1	1033.9	1037.5	1035.1	1033.3	1034.5	1034.5	1035.1
10°	1088.2	1090.6	1088.8	1090.0	1090.0	1092.4	1089.4	1090.0	1090.6	1089.4	1090.0
12.5°	1150.3	1151.5	1150.9	1154.5	1152.7	1154.5	1152.7	1155.1	1156.3	1157.5	1157.5
15°	1217.9	1219.1	1222.7	1222.1	1225.7	1224.5	1225.1	1222.1	1228.1	1224.5	1225.7
17.5°	1280.0	1279.4	1284.2	1286.0	1286.6	1287.2	1289.0	1286.6	1287.2	1289.0	1287.8
20°	1328.2	1332.5	1333.7	1338.5	1342.1	1343.3	1342.7	1344.5	1346.9	1344.5	1344.5
22.5°	1379.5	1385.5	1387.3	1390.4	1394.0	1394.6	1398.2	1400.0	1401.2	1400.6	1401.2
25°	1441.0	1445.3	1449.5	1455.5	1459.7	1460.3	1463.4	1465.8	1466.4	1465.8	1469.4
27.5°	1516.4	1521.9	1527.3	1534.5	1539.4	1540.6	1547.2	1547.2	1550.8	1552.6	1553.8
30°	1613.5	1615.4	1629.2	1636.5	1634.7	1643.1	1652.2	1651.5	1655.8	1657.0	1660.0
32.5°	1754.7	1754.7	1766.8	1775.8	1785.5	1782.4	1796.3	1793.9	1800.5	1804.2	1802.3
35°	1926.0	1932.0	1941.1	1946.5	1956.8	1962.2	1971.8	1977.3	1980.3	1979.7	1973.1
37.5°	2102.7	2112.4	2116.0	2129.3	2139.5	2148.6	2149.8	2143.8	2146.2	2134.1	2130.5
40°	2304.8	2318.7	2327.1	2347.0	2345.8	2357.3	2358.5	2341.0	2338.0	2322.3	2306.0
42.5°	2587.1	2606.4	2613.0	2628.1	2616.1	2621.5	2591.3	2584.1	2560.0	2534.6	2497.8
45°	2967.7	2958.1	2962.3	2958.1	2926.1	2902.6	2877.8	2842.3	2806.7	2757.8	2705.3
47.5°	3302.5	3307.3	3276.0	3256.0	3204.2	3171.0	3125.8	3063.6	3020.2	2954.4	2885.1
50°	3627.6	3573.9	3529.9	3484.1	3438.2	3377.3	3309.1	3254.2	3190.9	3108.9	3023.8
52.5°	3891.8	3822.4	3769.4	3704.2	3642.1	3574.5	3503.4	3423.7	3340.5	3258.5	3153.5
55°	4359.9	4259.2	4191.0	4077.0	4006.4	3911.7	3856.2	3753.1	3637.3	3528.7	3417.1
57.5°	5364.2	5213.4	5135.6	5071.1	4961.3	4805.7	4706.7	4537.2	4372.0	4256.1	4070.4
60°	6877.0	6723.8	6594.7	6442.1	6273.8	6062.7	5968.6	5769.0	5532.5	5341.3	5095.8
62.5°	7819.8	7608.1	7398.8	7184.7	7015.8	6850.5	6655.7	6454.2	6220.1	5960.2	5691.7
65°	7857.8	7603.9	7353.5	7135.2	6937.3	6722.6	6539.8	6335.4	6089.3	5821.4	5542.8
67.5°	7463.3	7179.2	6910.8	6671.3	6445.1	6246.1	6054.9	5862.5	5598.9	5374.5	5089.2
70°	6677.4	6418.0	6174.9	5902.3	5729.1	5505.4	5319.0	5116.3	4927.5	4717.6	4450.4
72.5°	4904.6	4709.1	4431.7	4315.9	4223.0	3985.9	3847.2	3830.3	3709.6	3458.1	3258.5
75°	1824.1	1552.6	1470.6	1519.4	1438.0	1465.2	1454.9	1397.0	1399.4	1356.6	1305.9
77.5°	357.1	331.8	311.9	317.3	295.0	285.3	305.8	299.8	288.9	291.9	287.1
80°	243.1	205.7	186.4	179.1	170.1	165.9	164.7	162.9	159.2	157.4	152.0
82.5°	239.5	177.9	140.5	120.6	113.4	109.8	106.8	106.2	105.0	104.4	106.2
85°	95.3	77.2	70.6	64.5	62.7	60.9	60.9	60.3	59.7	60.9	63.3
87.5°	46.4	39.2	35.6	32.6	31.4	30.8	30.8	31.4	32.0	34.4	39.2
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-GL2-7030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	966.3	966.9	965.7	966.3	965.7	964.5	963.9	965.7	965.1	964.5	964.5
5°	991.0	993.5	992.3	991.0	991.0	990.4	990.4	990.4	989.8	990.4	988.6
7.5°	1033.9	1033.3	1033.3	1032.1	1030.9	1032.1	1031.5	1029.7	1030.3	1029.1	1027.2
10°	1088.8	1087.0	1090.0	1090.0	1087.6	1087.0	1085.8	1083.9	1083.9	1082.1	1082.1
12.5°	1153.9	1152.1	1156.3	1153.3	1149.7	1149.1	1145.5	1144.3	1146.1	1145.5	1144.3
15°	1220.3	1220.9	1222.7	1222.1	1217.9	1217.9	1213.0	1213.6	1210.0	1208.8	1205.8
17.5°	1284.8	1285.4	1283.6	1283.6	1280.6	1278.8	1273.3	1273.9	1271.5	1266.7	1263.1
20°	1342.7	1342.1	1337.9	1341.5	1335.5	1334.3	1329.4	1324.6	1325.8	1321.0	1313.8
22.5°	1399.4	1398.2	1397.0	1395.2	1392.2	1391.0	1385.5	1384.9	1378.9	1371.7	1365.6
25°	1465.2	1464.6	1462.7	1463.4	1457.3	1457.9	1448.3	1445.9	1442.2	1434.4	1429.6
27.5°	1550.2	1550.2	1545.4	1543.6	1541.8	1539.4	1530.9	1524.9	1515.8	1506.8	1497.1
30°	1654.6	1653.4	1652.2	1647.3	1640.7	1637.1	1622.0	1612.3	1600.3	1583.4	1568.9
32.5°	1803.6	1793.3	1784.9	1774.0	1763.1	1751.7	1728.2	1711.9	1692.6	1665.4	1642.5
35°	1969.4	1951.9	1942.9	1920.6	1900.1	1877.1	1848.8	1815.6	1789.1	1753.5	1716.1
37.5°	2106.4	2093.1	2069.0	2043.6	2014.7	1971.2	1939.3	1903.7	1857.2	1818.0	1772.8
40°	2275.3	2245.1	2210.7	2168.5	2128.7	2079.8	2035.8	1984.5	1927.8	1871.1	1812.0
42.5°	2452.6	2406.1	2349.4	2300.6	2240.3	2176.3	2119.0	2049.7	1977.3	1901.3	1822.3
45°	2633.5	2576.2	2500.8	2431.5	2347.6	2267.4	2185.4	2090.7	1991.7	1890.4	1790.9
47.5°	2799.4	2715.6	2629.9	2536.4	2439.9	2336.8	2220.4	2096.1	1965.8	1832.5	1708.2
50°	2929.7	2824.8	2716.8	2608.8	2490.6	2356.7	2210.1	2047.8	1887.4	1727.5	1584.6
52.5°	3044.9	2927.3	2794.6	2660.7	2514.7	2350.0	2166.7	1975.5	1780.0	1603.3	1442.8
55°	3268.1	3120.3	2945.4	2772.9	2588.3	2380.8	2152.2	1918.2	1693.2	1500.7	1330.0
57.5°	3874.3	3674.7	3403.8	3164.4	2930.3	2628.1	2306.0	2017.7	1731.2	1503.8	1313.8
60°	4829.2	4504.1	4194.0	3829.1	3450.3	3035.9	2604.0	2215.5	1866.3	1581.0	1352.4
62.5°	5382.9	5039.7	4641.0	4198.8	3707.8	3203.0	2707.1	2253.5	1870.5	1559.9	1306.5
65°	5233.3	4888.3	4449.8	3997.4	3475.0	2958.7	2466.5	2031.0	1659.4	1372.3	1129.8
67.5°	4789.4	4428.7	4016.7	3514.8	3015.4	2537.0	2088.3	1678.1	1349.3	1081.5	867.4
70°	4143.3	3822.4	3425.5	2962.9	2478.5	2048.4	1670.2	1300.5	1022.4	776.9	608.0
72.5°	3075.1	2791.0	2543.1	2156.4	1801.7	1464.6	1156.3	904.8	665.3	503.1	387.3
75°	1290.8	1194.9	1154.5	1012.8	880.7	722.0	543.5	433.1	351.1	298.6	237.1
77.5°	313.1	313.1	294.4	275.7	253.3	229.2	202.7	181.0	170.1	160.4	152.6
80°	152.0	150.8	146.0	145.4	141.1	135.7	132.7	128.5	126.7	124.3	123.1
82.5°	106.8	106.2	104.4	106.8	106.2	108.6	109.8	110.4	110.4	111.0	111.6
85°	67.6	70.0	74.8	80.8	86.3	92.9	98.9	103.7	107.4	110.4	112.8
87.5°	42.8	48.9	52.5	61.5	70.6	80.8	92.3	97.1	101.3	101.9	98.3
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-GL2-7030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7	959.7
2.5°	964.5	963.9	965.1	963.9	963.9	963.3	961.5	959.7	957.9	957.3	955.5
5°	988.0	988.0	989.2	986.8	987.4	985.0	979.6	973.6	968.1	963.3	957.9
7.5°	1027.8	1026.0	1026.6	1026.0	1024.8	1020.0	1007.9	992.9	978.4	963.3	951.2
10°	1080.9	1077.3	1077.3	1076.1	1074.3	1067.7	1042.3	1012.2	982.0	954.9	935.0
12.5°	1140.0	1140.6	1135.8	1132.8	1129.8	1115.9	1077.9	1029.7	982.0	938.6	906.6
15°	1201.6	1201.0	1195.5	1193.7	1187.1	1166.6	1109.3	1038.7	970.5	906.6	858.9
17.5°	1257.1	1254.6	1249.2	1245.6	1238.4	1211.2	1130.4	1034.5	940.4	856.5	796.8
20°	1307.7	1304.7	1299.9	1293.2	1286.0	1246.8	1138.2	1012.8	892.7	796.8	736.5
22.5°	1360.2	1353.6	1348.1	1339.1	1331.3	1278.8	1132.8	974.2	838.4	730.5	665.9
25°	1418.7	1410.9	1399.4	1388.6	1376.5	1304.7	1117.7	925.9	773.3	658.7	593.5
27.5°	1482.0	1470.6	1455.5	1441.6	1422.3	1324.0	1091.8	872.2	702.1	587.5	520.0
30°	1549.0	1527.9	1509.2	1488.1	1463.4	1333.1	1054.4	805.9	623.7	515.1	447.6
32.5°	1614.1	1585.8	1558.1	1527.3	1493.5	1329.4	1001.3	727.5	545.3	447.6	390.9
35°	1680.5	1639.5	1600.9	1559.3	1518.2	1311.3	928.3	640.6	471.1	391.5	350.5
37.5°	1725.7	1674.5	1623.2	1573.1	1523.7	1272.1	831.2	543.5	404.1	351.1	321.5
40°	1748.7	1685.9	1623.2	1561.1	1500.1	1207.0	717.8	454.8	356.5	320.9	299.8
42.5°	1742.0	1664.2	1586.4	1512.8	1438.0	1103.2	594.8	381.8	323.3	297.4	278.7
45°	1687.1	1594.2	1505.6	1427.8	1334.3	969.9	488.6	336.6	298.0	278.1	260.6
47.5°	1584.0	1480.2	1371.7	1283.6	1196.1	815.5	406.6	308.2	275.7	259.4	241.9
50°	1452.5	1332.5	1223.9	1128.6	1042.9	671.4	350.5	284.1	257.6	243.7	225.0
52.5°	1307.7	1178.6	1079.7	979.6	895.7	560.4	311.2	257.6	240.1	225.6	210.5
55°	1187.7	1068.3	967.5	866.8	782.3	490.4	278.7	237.1	223.8	208.7	196.6
57.5°	1155.7	1019.4	909.6	814.3	727.5	447.6	255.2	218.4	209.3	197.8	184.6
60°	1169.0	1018.8	895.7	791.4	700.3	413.2	237.7	205.7	198.5	188.2	174.3
62.5°	1121.3	962.7	838.4	727.5	641.2	369.8	225.0	199.7	194.8	181.0	165.3
65°	955.5	810.1	690.7	594.8	520.6	311.2	214.7	205.1	200.3	176.1	159.2
67.5°	727.5	606.2	510.3	438.5	384.8	257.6	212.3	223.2	213.5	178.5	157.4
70°	503.1	411.4	349.9	306.4	272.6	217.2	220.2	243.1	229.2	186.4	167.7
72.5°	319.1	266.6	236.5	220.2	203.9	183.4	218.4	240.7	222.0	187.6	167.7
75°	204.5	182.8	172.5	166.5	161.7	159.8	192.4	197.8	178.5	162.9	156.2
77.5°	144.8	141.1	139.3	138.7	139.3	143.6	159.2	149.0	129.7	130.3	133.9
80°	122.4	122.4	121.2	121.8	123.1	124.9	127.3	109.8	99.5	107.4	119.4
82.5°	112.2	114.0	115.2	116.4	118.2	115.8	108.0	83.2	80.2	104.4	117.0
85°	114.0	114.0	114.6	115.8	116.4	104.4	89.9	62.7	61.5	117.0	110.4
87.5°	97.7	96.5	92.3	89.3	85.1	71.8	59.7	35.0	36.2	72.4	77.2
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: P177432

CATALOG NUMBER: VAL-F04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	959.7	959.7
2.5°	954.9	954.9
5°	954.9	954.9
7.5°	947.0	944.6
10°	924.1	921.1
12.5°	889.1	886.1
15°	835.4	831.8
17.5°	768.5	762.4
20°	698.5	690.1
22.5°	628.5	621.9
25°	556.7	550.7
27.5°	486.2	480.1
30°	421.0	418.6
32.5°	372.8	370.4
35°	337.2	336.0
37.5°	313.1	311.9
40°	291.9	290.7
42.5°	272.6	270.8
45°	253.3	253.9
47.5°	234.0	233.4
50°	217.2	217.2
52.5°	203.3	202.7
55°	190.6	190.0
57.5°	177.9	177.3
60°	167.1	165.3
62.5°	156.8	155.6
65°	150.2	149.6
67.5°	145.4	143.6
70°	144.2	139.3
72.5°	140.5	134.5
75°	132.1	129.1
77.5°	116.4	112.8
80°	89.9	83.2
82.5°	75.4	65.1
85°	55.5	51.3
87.5°	40.4	32.0
90°	0.0	0.0

(END OF REPORT)