

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: P177426

Luminaire Tested: **VAL-E04-LED-E-U-GL2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177426
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-E04-LED-E-U-GL2-8030
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9884.8 lumens
Efficiency: N/A
Efficacy: 101.7 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): 97.2
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

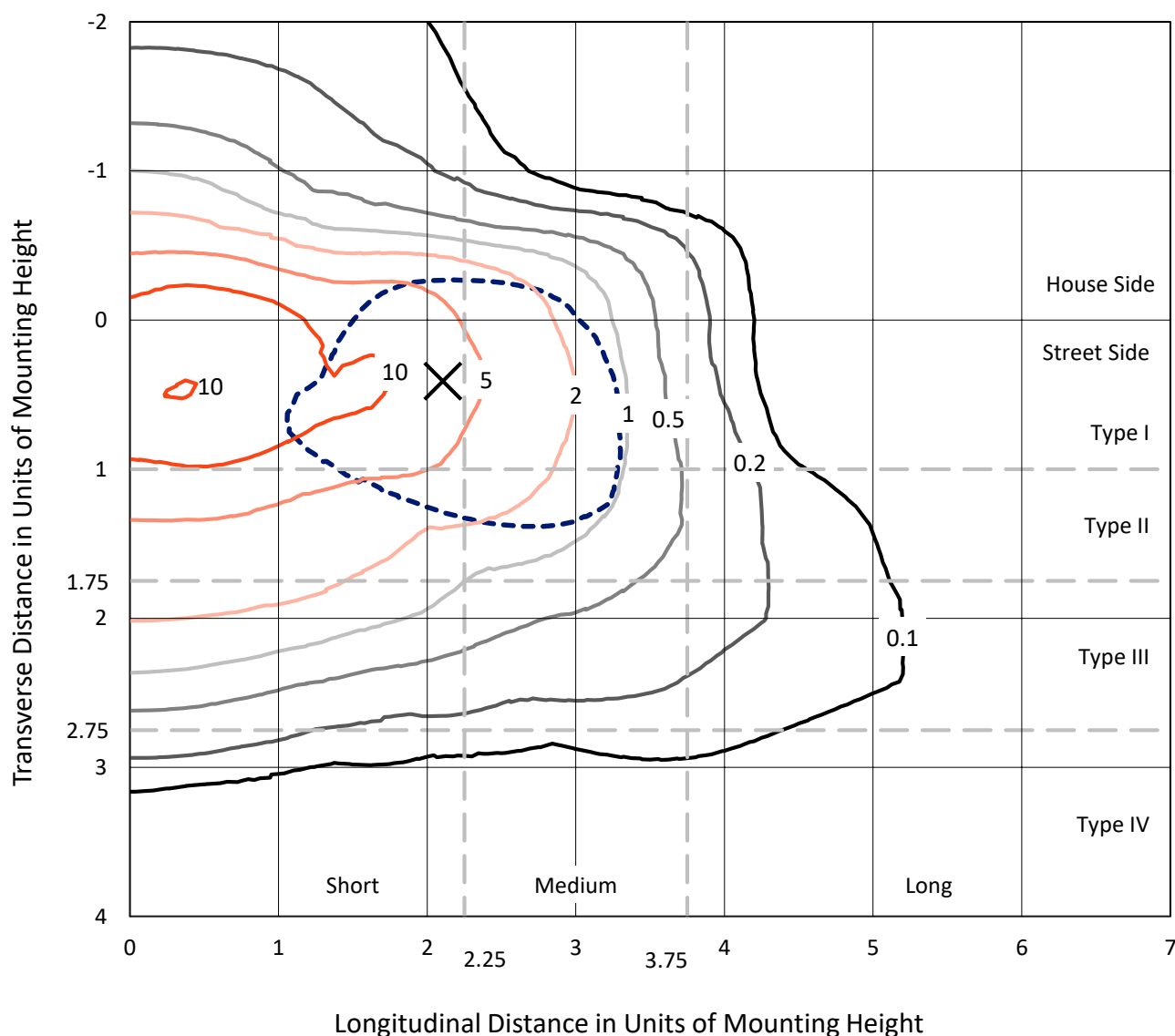


REPORT NUMBER: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

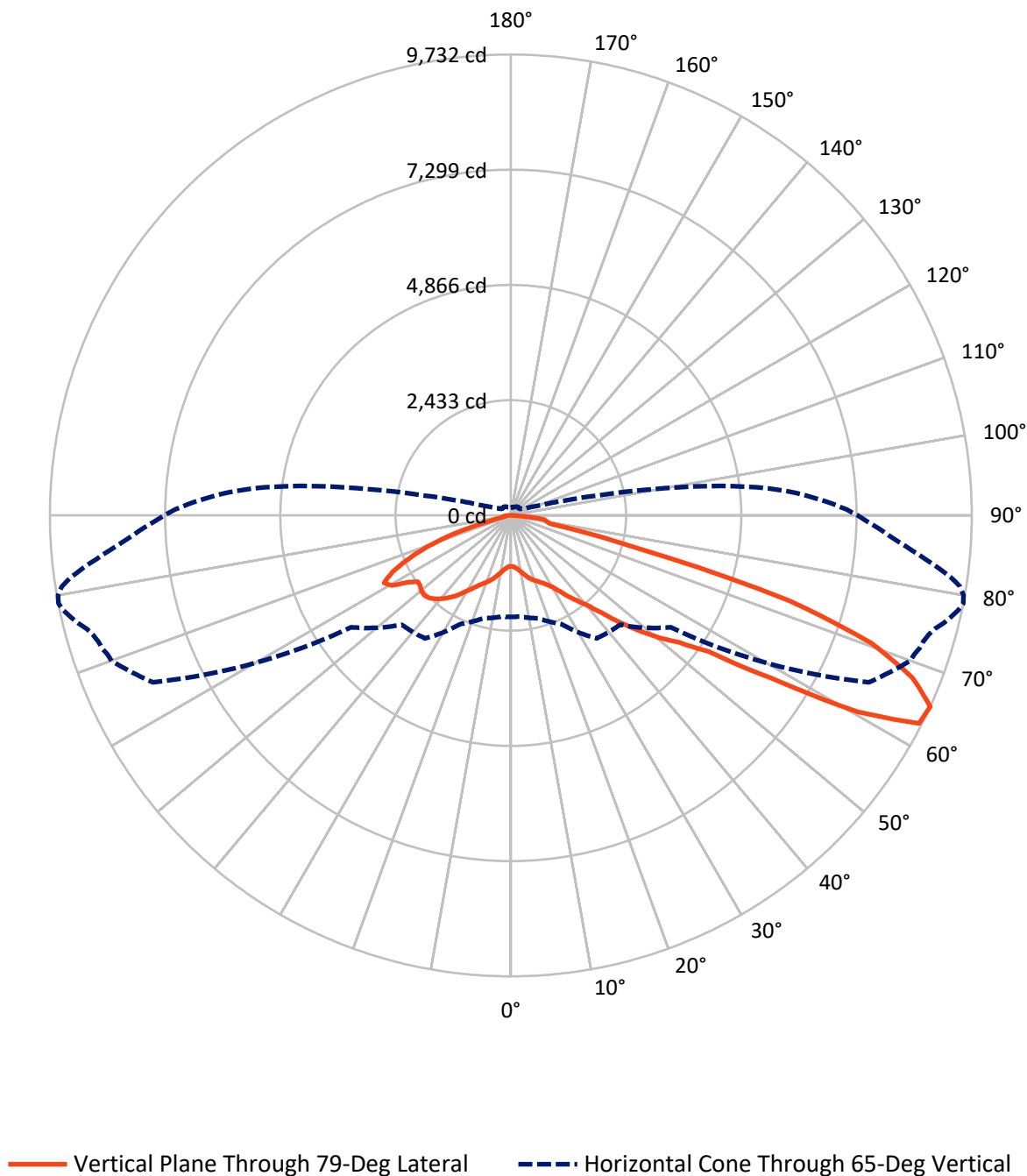


Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P177426

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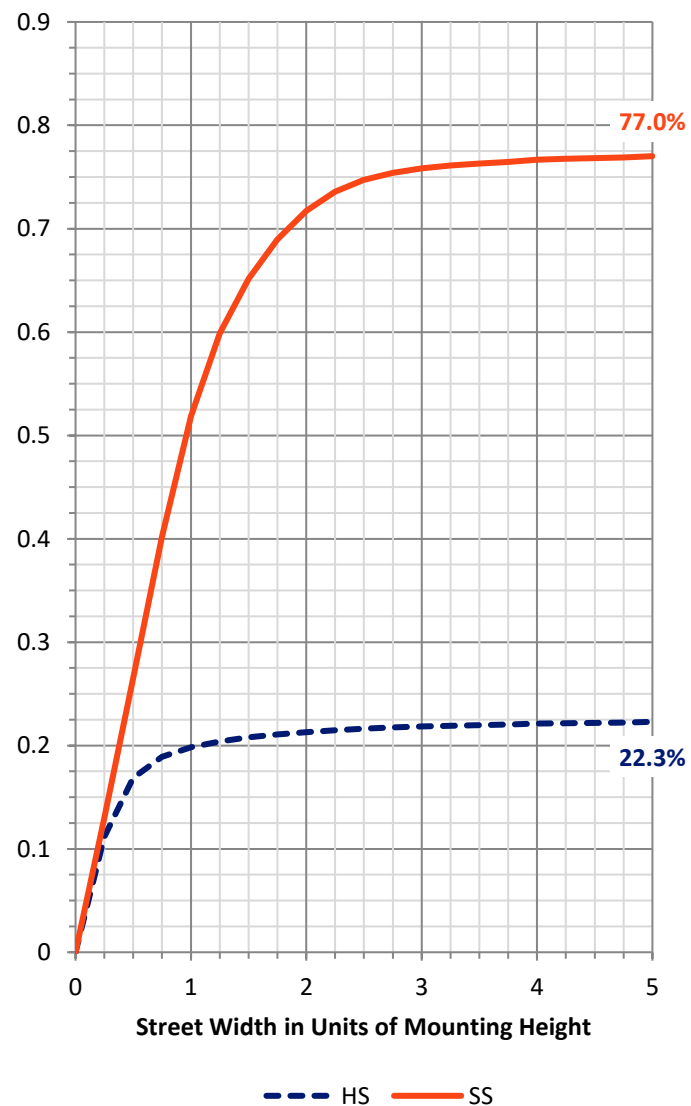
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2243.7	0.0	2243.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7641.0	0.0	7641.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	9884.8	0.0	9884.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.7	1.1
10°-20°	347.1	3.5
20°-30°	598.4	6.1
30°-40°	975.8	9.9
40°-50°	1629.1	16.5
50°-60°	2202.8	22.3
60°-70°	2736.6	27.7
70°-80°	1095.8	11.1
80°-90°	192.5	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°	9884.8	100.0
0°-180°	9884.8	100.0

Coefficient of Utilization



REPORT NUMBER: P177426

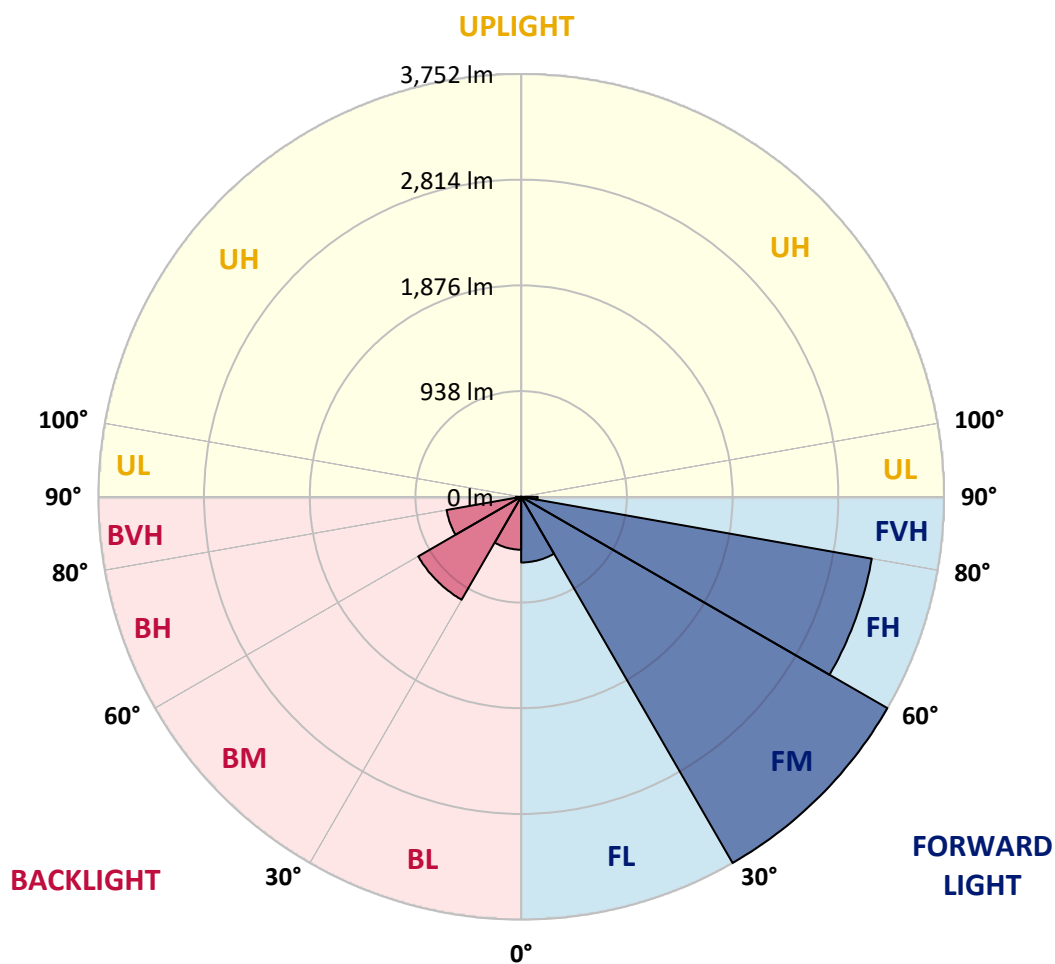
CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	582.9	5.9			
FM	(30°-60°)	3752.4	38.0			
FH	(60°-80°)	3159.7	32.0			G2/5000
FVH	(80°-90°)	146.0	1.5			G2/225
BL	(0°-30°)	469.3	4.7	B1/500		
BM	(30°-60°)	1055.3	10.7	B2/2500		
BH	(60°-80°)	672.6	6.8	B2/1000		G2/1000
BVH	(80°-90°)	46.5	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



REPORT NUMBER: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2
2.5°	1082.3	1081.7	1085.0	1087.7	1087.7	1089.1	1088.4	1084.4	1085.0	1086.4	1085.0
5°	1094.5	1091.8	1095.2	1099.2	1101.9	1105.3	1108.7	1109.3	1112.0	1112.0	1111.4
7.5°	1120.8	1118.8	1123.5	1124.9	1130.9	1136.3	1143.1	1147.8	1150.5	1151.9	1153.9
10°	1166.1	1164.7	1166.1	1168.8	1171.5	1177.5	1189.0	1199.1	1205.2	1205.2	1207.9
12.5°	1220.7	1215.3	1216.7	1211.3	1212.6	1225.5	1239.0	1255.9	1266.0	1267.3	1268.7
15°	1263.3	1260.6	1258.6	1251.1	1256.5	1273.4	1294.3	1318.7	1327.4	1334.9	1334.2
17.5°	1303.1	1299.7	1295.0	1284.9	1290.3	1317.3	1349.0	1376.0	1390.9	1392.2	1393.6
20°	1350.4	1346.3	1337.6	1316.6	1315.3	1353.1	1395.6	1424.7	1438.2	1444.2	1446.3
22.5°	1410.5	1405.1	1388.9	1348.4	1337.6	1382.1	1432.8	1468.5	1482.7	1488.8	1492.2
25°	1487.4	1476.6	1451.0	1387.5	1365.2	1411.8	1472.6	1515.8	1535.4	1541.5	1545.5
27.5°	1557.0	1548.9	1517.8	1442.9	1404.4	1451.7	1521.2	1576.6	1603.6	1611.0	1617.1
30°	1638.0	1626.5	1601.6	1521.9	1470.6	1512.4	1600.9	1671.1	1704.2	1704.9	1718.4
32.5°	1828.4	1821.0	1798.0	1710.3	1623.8	1626.5	1708.9	1805.5	1838.5	1844.0	1856.1
35°	2110.7	2108.0	2107.3	2058.7	1994.5	1928.4	1934.4	2008.0	2030.3	2039.1	2043.1
37.5°	2296.3	2320.0	2377.4	2412.5	2396.3	2410.4	2336.2	2246.4	2233.5	2224.1	2228.1
40°	2456.4	2477.3	2593.4	2755.5	2854.0	2923.6	2858.1	2582.6	2480.0	2450.3	2438.8
42.5°	2550.9	2574.5	2740.6	2999.9	3251.1	3415.8	3433.4	3050.5	2789.9	2786.5	2743.3
45°	2602.2	2625.8	2824.3	3173.4	3528.6	3825.6	3979.6	3626.5	3243.6	3215.3	3155.2
47.5°	2592.1	2614.3	2821.0	3237.5	3692.6	4097.7	4405.6	4208.5	3766.9	3698.7	3615.7
50°	2468.5	2484.7	2701.4	3132.9	3648.7	4211.2	4697.3	4742.6	4359.0	4266.5	4142.3
52.5°	2340.9	2369.9	2549.5	2947.2	3449.6	4141.0	4871.5	5228.7	4912.0	4848.6	4689.2
55°	2272.0	2295.0	2441.5	2781.1	3239.6	3901.3	4943.8	5687.1	5583.8	5558.2	5445.4
57.5°	2269.3	2291.6	2408.4	2680.5	3068.8	3651.4	4964.7	6395.4	6698.6	6705.3	6672.9
60°	2380.1	2403.0	2500.9	2729.1	3016.1	3437.4	4889.7	7400.1	8069.9	8129.3	8228.6
62.5°	2395.6	2406.4	2524.5	2832.4	3207.8	3277.4	4581.2	8236.7	9012.5	9067.2	9121.9
65°	2143.1	2142.4	2247.0	2530.6	3168.0	3261.2	4117.3	8339.3	8974.7	9007.7	9075.9
67.5°	1598.2	1584.7	1644.1	1903.4	2513.7	3265.2	3567.7	7564.9	8275.2	8338.0	8360.9
70°	823.7	844.7	885.2	1043.8	1596.2	2628.5	3064.7	6382.6	7264.4	7288.0	7369.7
72.5°	338.3	329.5	357.2	438.9	798.8	1737.3	2535.3	5036.9	5999.8	5983.6	5998.4
75°	188.4	191.1	199.2	228.9	388.2	872.3	2178.2	3565.7	4080.2	3800.7	3716.3
77.5°	151.2	152.6	153.3	158.7	212.0	465.2	1671.8	2348.3	2051.9	1905.4	1849.4
80°	110.7	118.2	126.3	127.6	145.8	264.0	916.9	1977.0	1731.9	1610.3	1510.4
82.5°	89.1	92.5	110.1	112.8	116.1	157.3	415.2	1856.8	1725.1	1600.9	1463.1
85°	53.3	59.4	89.8	90.5	91.8	95.9	229.6	756.2	940.5	831.2	760.9
87.5°	18.9	24.3	44.6	37.1	47.3	39.2	100.6	253.2	311.9	296.4	262.6
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: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2
2.5°	1084.4	1084.4	1085.7	1085.0	1085.0	1085.0	1085.0	1083.7	1083.7	1081.7	1083.0
5°	1111.4	1110.7	1111.4	1112.0	1111.4	1112.7	1112.0	1111.4	1112.0	1111.4	1112.0
7.5°	1154.6	1151.2	1155.9	1153.2	1152.6	1156.6	1154.6	1156.6	1157.3	1156.6	1155.9
10°	1209.3	1211.3	1211.3	1211.3	1209.9	1214.0	1214.7	1216.0	1216.7	1219.4	1219.4
12.5°	1272.1	1272.7	1275.4	1274.8	1276.1	1280.8	1284.2	1284.9	1285.6	1287.6	1284.9
15°	1339.6	1340.9	1340.9	1347.0	1345.0	1351.7	1353.8	1353.8	1354.4	1362.5	1363.2
17.5°	1399.7	1399.7	1405.1	1405.1	1410.5	1411.8	1417.9	1418.6	1421.3	1428.7	1429.4
20°	1450.3	1453.0	1456.4	1460.4	1462.5	1466.5	1470.6	1474.6	1478.0	1484.1	1484.7
22.5°	1498.3	1501.0	1506.4	1509.1	1513.8	1516.5	1519.9	1524.6	1530.0	1538.1	1540.1
25°	1553.6	1556.3	1562.4	1566.4	1571.8	1575.9	1582.0	1588.1	1591.4	1599.5	1605.6
27.5°	1623.8	1631.9	1640.0	1642.1	1646.1	1655.6	1663.7	1671.8	1679.2	1683.3	1690.7
30°	1726.5	1726.5	1743.3	1743.3	1750.8	1759.6	1765.0	1773.7	1787.2	1791.3	1800.7
32.5°	1864.2	1867.6	1873.7	1891.9	1905.4	1909.4	1913.5	1926.3	1934.4	1944.6	1956.0
35°	2060.7	2064.1	2067.4	2085.0	2100.5	2104.6	2108.6	2116.7	2130.2	2147.8	2142.4
37.5°	2236.9	2238.9	2249.7	2269.3	2278.1	2288.9	2292.3	2307.1	2314.6	2330.8	2331.4
40°	2448.9	2444.2	2450.3	2472.6	2486.1	2485.4	2496.2	2523.2	2528.6	2536.0	2554.9
42.5°	2744.7	2727.1	2746.0	2753.4	2773.7	2786.5	2808.1	2826.4	2839.2	2867.5	2881.0
45°	3126.8	3108.6	3124.1	3127.5	3169.4	3182.2	3214.6	3238.9	3266.6	3299.0	3308.4
47.5°	3562.3	3528.6	3509.7	3530.6	3580.5	3601.5	3633.2	3656.2	3685.2	3702.1	3696.7
50°	4066.7	3985.7	3947.9	3937.0	3972.8	4002.5	4051.8	4062.6	4076.1	4075.5	4076.1
52.5°	4629.1	4544.7	4465.7	4411.0	4405.6	4445.5	4457.6	4460.3	4456.3	4425.9	4407.0
55°	5363.7	5357.7	5274.6	5161.2	5153.7	5149.0	5078.1	5069.3	5053.1	5006.6	4942.4
57.5°	6696.6	6764.1	6709.4	6706.7	6647.3	6608.1	6477.8	6413.0	6344.8	6218.5	6117.9
60°	8237.4	8335.3	8389.3	8412.9	8529.0	8529.0	8422.4	8330.5	8219.8	8027.4	7839.7
62.5°	9165.1	9250.8	9330.5	9455.4	9603.3	9668.8	9674.2	9592.5	9452.7	9233.3	8967.9
65°	9106.3	9169.8	9266.3	9413.5	9535.7	9653.2	9732.2	9707.2	9600.6	9381.1	9092.1
67.5°	8441.3	8533.8	8658.7	8794.4	8907.8	9018.5	9146.2	9155.6	9127.3	8918.6	8657.3
70°	7415.0	7533.8	7612.8	7783.6	7834.9	7947.0	8075.3	8136.7	8090.8	7930.1	7776.9
72.5°	6024.1	6117.9	6131.4	6057.2	6082.8	6110.5	6141.6	5997.7	5942.4	5727.7	5629.1
75°	3652.8	3529.2	3425.3	3321.9	3013.4	2904.0	2735.9	2404.4	2366.6	2139.0	1981.0
77.5°	1737.3	1685.3	1591.4	1434.1	1224.8	1024.3	850.1	690.7	631.3	519.9	442.9
80°	1454.4	1392.2	1307.8	1191.0	1044.5	898.7	760.9	642.8	523.9	426.7	341.0
82.5°	1334.2	1226.2	1107.3	1006.7	903.4	804.2	711.7	605.0	542.2	437.5	357.2
85°	674.5	590.8	478.7	403.1	340.3	276.8	239.7	204.6	182.3	145.2	126.3
87.5°	226.2	185.0	137.7	116.8	105.3	90.5	83.0	79.0	77.0	68.2	60.8
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: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2
2.5°	1083.0	1083.0	1083.0	1083.0	1082.3	1082.3	1082.3	1082.3	1082.3	1082.3	1083.0
5°	1110.7	1110.7	1111.4	1113.4	1109.3	1110.7	1112.0	1110.0	1112.0	1110.0	1112.7
7.5°	1155.3	1157.3	1155.9	1158.6	1157.3	1161.3	1158.6	1156.6	1158.0	1158.0	1158.6
10°	1218.0	1220.7	1218.7	1220.1	1220.1	1222.8	1219.4	1220.1	1220.7	1219.4	1220.1
12.5°	1287.6	1288.9	1288.3	1292.3	1290.3	1292.3	1290.3	1293.0	1294.3	1295.7	1295.7
15°	1363.2	1364.6	1368.6	1367.9	1372.0	1370.6	1371.3	1367.9	1374.7	1370.6	1372.0
17.5°	1432.8	1432.1	1437.5	1439.5	1440.2	1440.9	1442.9	1440.2	1440.9	1442.9	1441.5
20°	1486.8	1491.5	1492.9	1498.3	1502.3	1503.7	1503.0	1505.0	1507.7	1505.0	1505.0
22.5°	1544.2	1550.9	1552.9	1556.3	1560.4	1561.0	1565.1	1567.1	1568.5	1567.8	1568.5
25°	1613.0	1617.8	1622.5	1629.2	1634.0	1634.6	1638.0	1640.7	1641.4	1640.7	1644.8
27.5°	1697.4	1703.5	1709.6	1717.7	1723.1	1724.4	1731.9	1731.9	1735.9	1737.9	1739.3
30°	1806.1	1808.2	1823.7	1831.8	1829.8	1839.2	1849.4	1848.7	1853.4	1854.8	1858.1
32.5°	1964.1	1964.1	1977.6	1987.8	1998.6	1995.2	2010.7	2008.0	2015.5	2019.5	2017.5
35°	2155.9	2162.6	2172.8	2178.8	2190.3	2196.4	2207.2	2213.3	2216.7	2216.0	2208.6
37.5°	2353.7	2364.5	2368.6	2383.4	2394.9	2405.0	2406.4	2399.6	2402.3	2388.8	2384.8
40°	2579.9	2595.4	2604.9	2627.2	2625.8	2638.7	2640.0	2620.4	2617.0	2599.5	2581.3
42.5°	2895.9	2917.5	2924.9	2941.8	2928.3	2934.4	2900.6	2892.5	2865.5	2837.2	2796.0
45°	3321.9	3311.1	3315.9	3311.1	3275.4	3249.0	3221.3	3181.5	3141.7	3087.0	3028.2
47.5°	3696.7	3702.1	3667.0	3644.7	3586.6	3549.5	3498.8	3429.3	3380.7	3307.1	3229.4
50°	4060.6	4000.5	3951.2	3899.9	3848.6	3780.4	3704.1	3642.7	3571.8	3479.9	3384.7
52.5°	4356.3	4278.7	4219.3	4146.4	4076.8	4001.2	3921.5	3832.4	3739.2	3647.4	3529.9
55°	4880.3	4767.5	4691.2	4563.6	4484.6	4378.6	4316.5	4201.0	4071.4	3949.9	3825.0
57.5°	6004.5	5835.7	5748.6	5676.3	5553.5	5379.3	5268.5	5078.8	4893.8	4764.2	4556.2
60°	7697.9	7526.4	7381.9	7211.1	7022.7	6786.4	6681.0	6457.5	6192.9	5978.8	5704.0
62.5°	8753.2	8516.2	8281.9	8042.2	7853.2	7668.2	7450.1	7224.6	6962.6	6671.6	6371.1
65°	8795.7	8511.5	8231.3	7986.9	7765.4	7525.0	7320.4	7091.5	6816.1	6516.3	6204.3
67.5°	8354.2	8036.1	7735.7	7467.6	7214.4	6991.6	6777.6	6562.2	6267.1	6016.0	5696.6
70°	7474.4	7184.1	6911.9	6606.8	6413.0	6162.5	5953.8	5727.0	5515.6	5280.7	4981.6
72.5°	5490.0	5271.2	4960.6	4831.0	4727.0	4461.7	4306.4	4287.5	4152.4	3870.9	3647.4
75°	2041.8	1737.9	1646.1	1700.8	1609.7	1640.0	1628.6	1563.7	1566.4	1518.5	1461.8
77.5°	399.7	371.4	349.1	355.2	330.2	319.4	342.3	335.6	323.4	326.8	321.4
80°	272.1	230.2	208.6	200.5	190.4	185.7	184.3	182.3	178.3	176.2	170.1
82.5°	268.1	199.2	157.3	135.0	126.9	122.9	119.5	118.8	117.5	116.8	118.8
85°	106.7	86.4	79.0	72.2	70.2	68.2	68.2	67.5	66.8	68.2	70.9
87.5°	52.0	43.9	39.8	36.5	35.1	34.4	34.4	35.1	35.8	38.5	43.9
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: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2
2.5°	1081.7	1082.3	1081.0	1081.7	1081.0	1079.6	1079.0	1081.0	1080.3	1079.6	1079.6
5°	1109.3	1112.0	1110.7	1109.3	1109.3	1108.7	1108.7	1108.7	1108.0	1108.7	1106.6
7.5°	1157.3	1156.6	1156.6	1155.3	1153.9	1155.3	1154.6	1152.6	1153.2	1151.9	1149.9
10°	1218.7	1216.7	1220.1	1220.1	1217.4	1216.7	1215.3	1213.3	1213.3	1211.3	1211.3
12.5°	1291.6	1289.6	1294.3	1291.0	1286.9	1286.2	1282.2	1280.8	1282.9	1282.2	1280.8
15°	1365.9	1366.6	1368.6	1367.9	1363.2	1363.2	1357.8	1358.5	1354.4	1353.1	1349.7
17.5°	1438.2	1438.8	1436.8	1436.8	1433.4	1431.4	1425.3	1426.0	1423.3	1417.9	1413.9
20°	1503.0	1502.3	1497.6	1501.6	1494.9	1493.5	1488.1	1482.7	1484.1	1478.7	1470.6
22.5°	1566.4	1565.1	1563.7	1561.7	1558.3	1557.0	1550.9	1550.2	1543.5	1535.4	1528.6
25°	1640.0	1639.4	1637.3	1638.0	1631.3	1631.9	1621.1	1618.4	1614.4	1605.6	1600.2
27.5°	1735.2	1735.2	1729.8	1727.8	1725.8	1723.1	1713.6	1706.9	1696.8	1686.6	1675.8
30°	1852.1	1850.7	1849.4	1844.0	1836.5	1832.5	1815.6	1804.8	1791.3	1772.4	1756.2
32.5°	2018.8	2007.3	1997.9	1985.7	1973.6	1960.8	1934.4	1916.2	1894.6	1864.2	1838.5
35°	2204.5	2184.9	2174.8	2149.8	2126.9	2101.2	2069.5	2032.3	2002.6	1962.8	1920.9
37.5°	2357.8	2342.9	2315.9	2287.6	2255.1	2206.5	2170.7	2130.9	2078.9	2035.0	1984.4
40°	2546.8	2513.1	2474.6	2427.3	2382.8	2328.1	2278.8	2221.4	2157.9	2094.4	2028.3
42.5°	2745.3	2693.3	2629.9	2575.2	2507.7	2436.1	2372.0	2294.3	2213.3	2128.2	2039.8
45°	2947.9	2883.7	2799.3	2721.7	2627.9	2538.0	2446.2	2340.2	2229.5	2116.1	2004.6
47.5°	3133.6	3039.7	2943.8	2839.2	2731.2	2615.7	2485.4	2346.3	2200.5	2051.2	1912.1
50°	3279.4	3161.9	3041.1	2920.2	2787.9	2638.0	2473.9	2292.3	2112.7	1933.8	1773.7
52.5°	3408.4	3276.7	3128.2	2978.3	2814.9	2630.6	2425.3	2211.3	1992.5	1794.7	1615.1
55°	3658.2	3492.8	3297.0	3103.9	2897.3	2665.0	2409.1	2147.1	1895.3	1679.9	1488.8
57.5°	4336.8	4113.3	3810.1	3542.1	3280.1	2941.8	2581.3	2258.5	1937.8	1683.3	1470.6
60°	5405.6	5041.7	4694.6	4286.1	3862.1	3398.2	2914.8	2480.0	2089.0	1769.7	1513.8
62.5°	6025.4	5641.2	5194.9	4700.0	4150.4	3585.3	3030.3	2522.5	2093.8	1746.0	1462.5
65°	5858.0	5471.8	4980.9	4474.5	3889.8	3311.8	2760.9	2273.4	1857.5	1536.1	1264.6
67.5°	5361.0	4957.3	4496.1	3934.3	3375.3	2839.9	2337.5	1878.4	1510.4	1210.6	970.9
70°	4637.9	4278.7	3834.4	3316.5	2774.4	2293.0	1869.6	1455.7	1144.5	869.6	680.6
72.5°	3442.1	3124.1	2846.6	2413.8	2016.8	1639.4	1294.3	1012.8	744.7	563.1	433.5
75°	1444.9	1337.6	1292.3	1133.6	985.8	808.2	608.3	484.8	393.0	334.2	265.4
77.5°	350.4	350.4	329.5	308.6	283.6	256.6	226.9	202.6	190.4	179.6	170.8
80°	170.1	168.8	163.4	162.7	158.0	151.9	148.5	143.8	141.8	139.1	137.7
82.5°	119.5	118.8	116.8	119.5	118.8	121.5	122.9	123.6	123.6	124.2	124.9
85°	75.6	78.3	83.7	90.5	96.6	104.0	110.7	116.1	120.2	123.6	126.3
87.5°	47.9	54.7	58.7	68.9	79.0	90.5	103.3	108.7	113.4	114.1	110.1
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: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2	1074.2
2.5°	1079.6	1079.0	1080.3	1079.0	1079.0	1078.3	1076.3	1074.2	1072.2	1071.5	1069.5
5°	1106.0	1106.0	1107.3	1104.6	1105.3	1102.6	1096.5	1089.8	1083.7	1078.3	1072.2
7.5°	1150.5	1148.5	1149.2	1148.5	1147.2	1141.8	1128.2	1111.4	1095.2	1078.3	1064.8
10°	1209.9	1205.9	1205.9	1204.5	1202.5	1195.1	1166.7	1133.0	1099.2	1068.8	1046.5
12.5°	1276.1	1276.8	1271.4	1268.0	1264.6	1249.1	1206.6	1152.6	1099.2	1050.6	1014.8
15°	1345.0	1344.3	1338.2	1336.2	1328.8	1305.8	1241.7	1162.7	1086.4	1014.8	961.5
17.5°	1407.1	1404.4	1398.3	1394.3	1386.2	1355.8	1265.3	1158.0	1052.6	958.8	891.9
20°	1463.8	1460.4	1455.0	1447.6	1439.5	1395.6	1274.1	1133.6	999.3	891.9	824.4
22.5°	1522.6	1515.1	1509.1	1498.9	1490.2	1431.4	1268.0	1090.4	938.5	817.7	745.4
25°	1588.1	1579.3	1566.4	1554.3	1540.8	1460.4	1251.1	1036.4	865.6	737.3	664.4
27.5°	1658.9	1646.1	1629.2	1613.7	1592.1	1482.0	1222.1	976.3	785.9	657.6	582.0
30°	1733.9	1710.3	1689.3	1665.7	1638.0	1492.2	1180.2	902.1	698.1	576.6	501.0
32.5°	1806.8	1775.1	1744.0	1709.6	1671.8	1488.1	1120.8	814.3	610.4	501.0	437.5
35°	1881.1	1835.2	1792.0	1745.4	1699.5	1467.9	1039.1	717.1	527.3	438.2	392.3
37.5°	1931.7	1874.3	1816.9	1760.9	1705.5	1424.0	930.4	608.3	452.4	393.0	359.9
40°	1957.4	1887.2	1816.9	1747.4	1679.2	1351.1	803.5	509.1	399.0	359.2	335.6
42.5°	1950.0	1862.9	1775.8	1693.4	1609.7	1234.9	665.7	427.4	361.9	332.9	311.9
45°	1888.5	1784.5	1685.3	1598.2	1493.5	1085.7	546.9	376.8	333.5	311.3	291.7
47.5°	1773.1	1656.9	1535.4	1436.8	1338.9	912.9	455.1	345.0	308.6	290.3	270.8
50°	1625.9	1491.5	1370.0	1263.3	1167.4	751.5	392.3	318.0	288.3	272.8	251.8
52.5°	1463.8	1319.3	1208.6	1096.5	1002.7	627.3	348.4	288.3	268.7	252.5	235.6
55°	1329.5	1195.8	1083.0	970.3	875.7	548.9	311.9	265.4	250.5	233.6	220.1
57.5°	1293.7	1141.1	1018.2	911.5	814.3	501.0	285.6	244.4	234.3	221.5	206.6
60°	1308.5	1140.4	1002.7	885.9	783.9	462.5	266.0	230.2	222.1	210.7	195.1
62.5°	1255.2	1077.6	938.5	814.3	717.7	413.9	251.8	223.5	218.1	202.6	185.0
65°	1069.5	906.8	773.1	665.7	582.7	348.4	240.4	229.6	224.2	197.2	178.3
67.5°	814.3	678.6	571.2	490.9	430.8	288.3	237.7	249.8	239.0	199.9	176.2
70°	563.1	460.5	391.6	343.0	305.2	243.1	246.4	272.1	256.6	208.6	187.7
72.5°	357.2	298.4	264.7	246.4	228.2	205.3	244.4	269.4	248.5	210.0	187.7
75°	228.9	204.6	193.1	186.4	181.0	178.9	215.4	221.5	199.9	182.3	174.9
77.5°	162.0	158.0	156.0	155.3	156.0	160.7	178.3	166.8	145.2	145.8	149.9
80°	137.1	137.1	135.7	136.4	137.7	139.8	142.5	122.9	111.4	120.2	133.7
82.5°	125.6	127.6	129.0	130.3	132.3	129.6	120.9	93.2	89.8	116.8	131.0
85°	127.6	127.6	128.3	129.6	130.3	116.8	100.6	70.2	68.9	131.0	123.6
87.5°	109.4	108.0	103.3	99.9	95.2	80.3	66.8	39.2	40.5	81.0	86.4
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: P177426

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-8030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1074.2	1074.2
2.5°	1068.8	1068.8
5°	1068.8	1068.8
7.5°	1060.1	1057.4
10°	1034.4	1031.0
12.5°	995.2	991.9
15°	935.1	931.1
17.5°	860.2	853.4
20°	781.9	772.4
22.5°	703.6	696.1
25°	623.2	616.5
27.5°	544.2	537.5
30°	471.3	468.6
32.5°	417.3	414.6
35°	377.4	376.1
37.5°	350.4	349.1
40°	326.8	325.4
42.5°	305.2	303.2
45°	283.6	284.3
47.5°	262.0	261.3
50°	243.1	243.1
52.5°	227.5	226.9
55°	213.4	212.7
57.5°	199.2	198.5
60°	187.0	185.0
62.5°	175.6	174.2
65°	168.1	167.4
67.5°	162.7	160.7
70°	161.4	156.0
72.5°	157.3	150.6
75°	147.9	144.5
77.5°	130.3	126.3
80°	100.6	93.2
82.5°	84.4	72.9
85°	62.1	57.4
87.5°	45.2	35.8
90°	0.0	0.0

(END OF REPORT)