

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: P177427

Luminaire Tested: **VAL-E04-LED-E-U-GL2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177427
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-GL2-7030
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10697.1 lumens
Efficiency: N/A
Efficacy: 110.1 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): 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

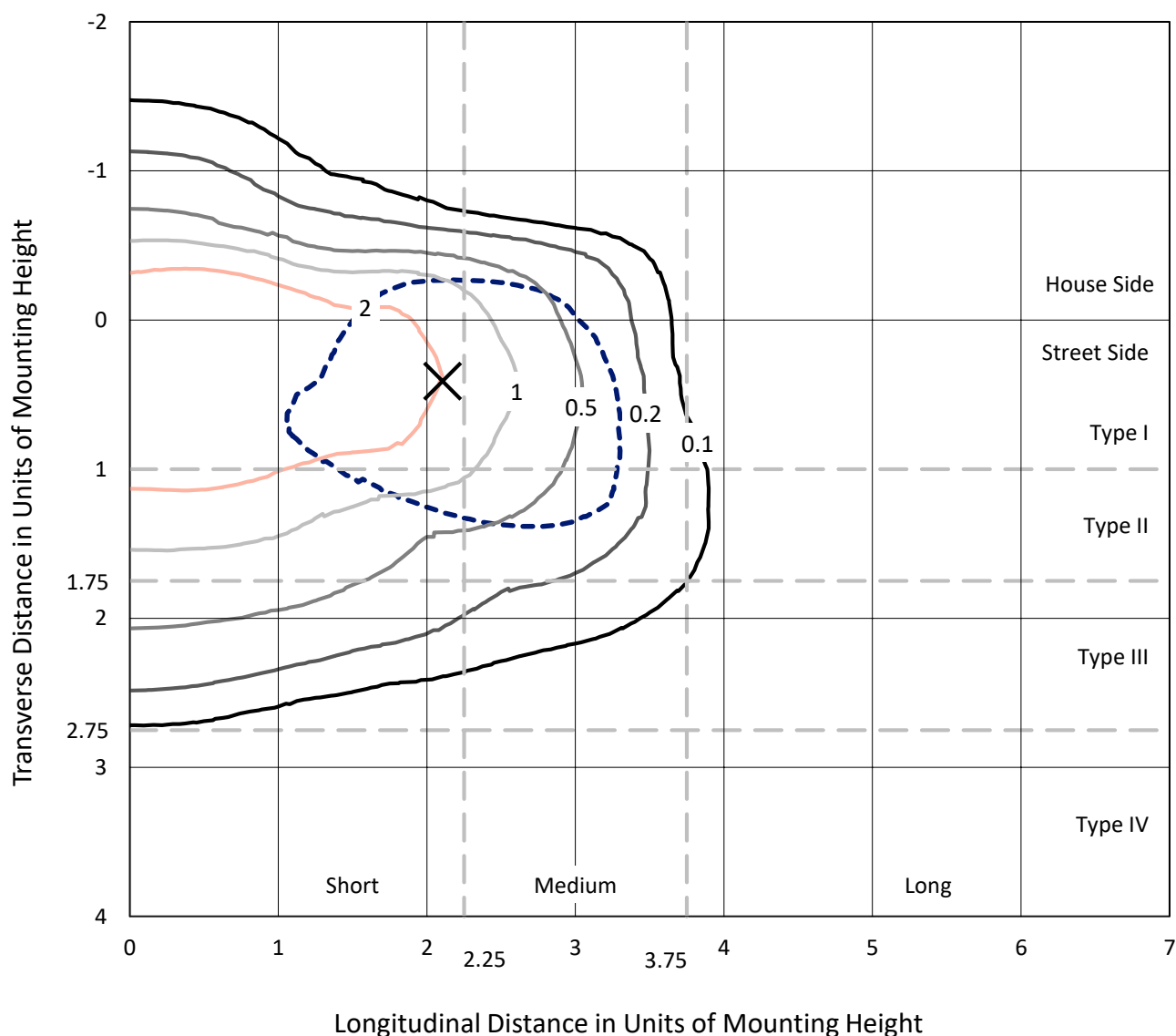


REPORT NUMBER: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

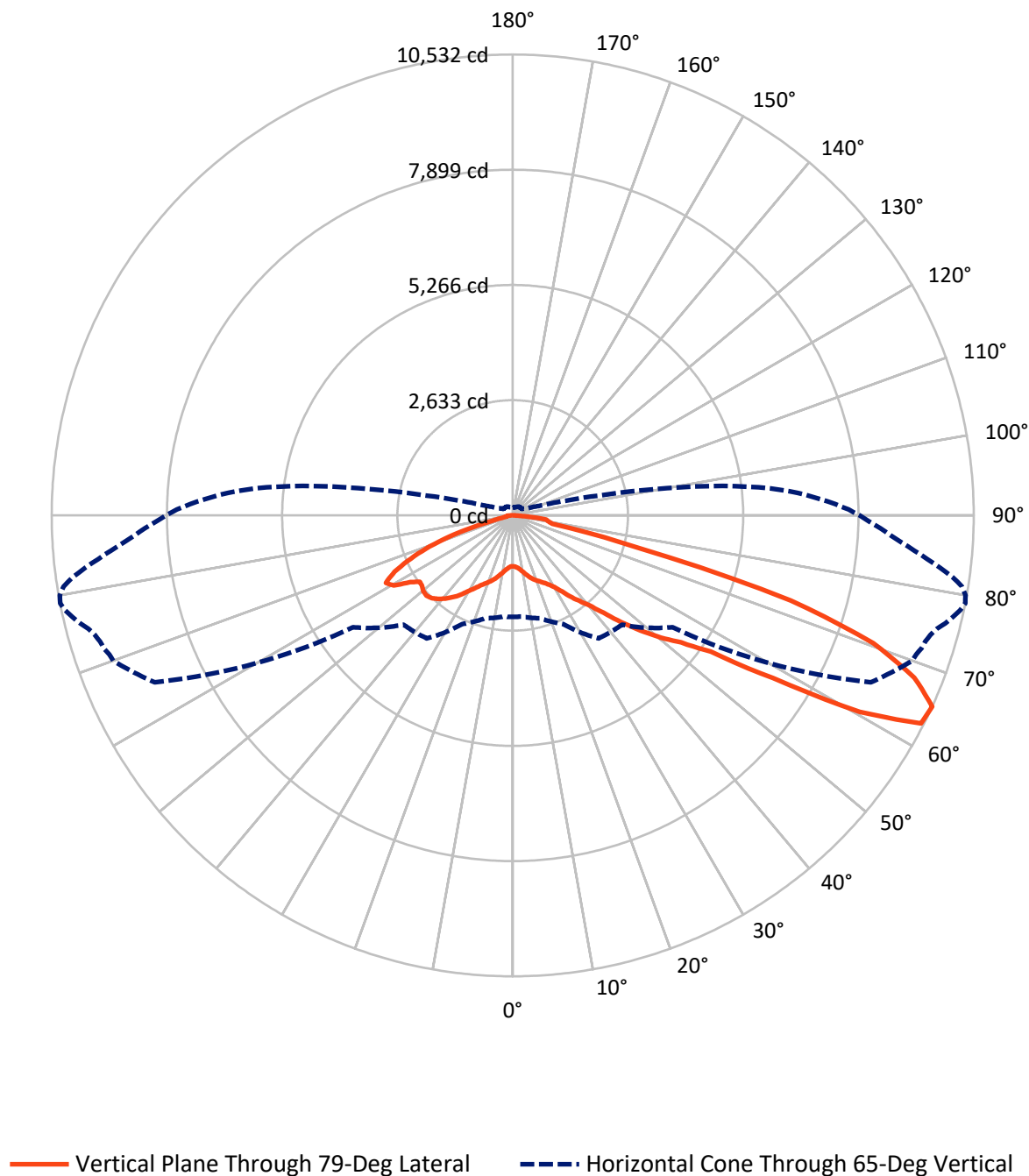


Based on 20 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P177427

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2428.1	0.0	2428.1
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	8269.0	0.0	8269.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	10697.1	0.0	10697.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.1
10°-20°	375.6	3.5
20°-30°	647.6	6.1
30°-40°	1056.0	9.9
40°-50°	1763.0	16.5
50°-60°	2383.8	22.3
60°-70°	2961.4	27.7
70°-80°	1185.8	11.1
80°-90°	208.4	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°	10697.1	100.0
0°-180°	10697.1	100.0

Coefficient of Utilization



REPORT NUMBER: P177427

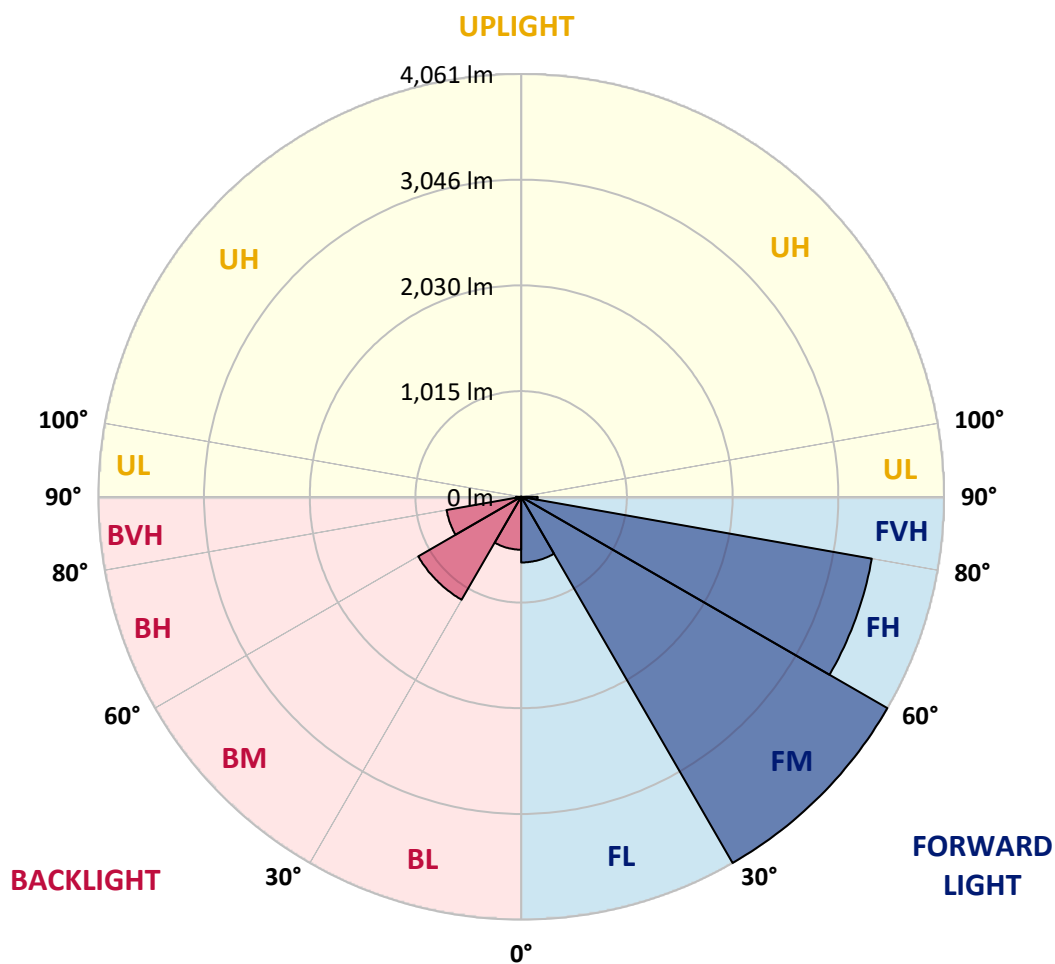
CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	630.8	5.9			
FM	(30°-60°)	4060.8	38.0			
FH	(60°-80°)	3419.4	32.0			G2/5000
FVH	(80°-90°)	158.0	1.5			G2/225
BL	(0°-30°)	507.8	4.7	B2/1000		
BM	(30°-60°)	1142.0	10.7	B2/2500		
BH	(60°-80°)	727.9	6.8	B2/1000		G2/1000
BVH	(80°-90°)	50.3	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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1171.3	1170.5	1174.2	1177.1	1177.1	1178.6	1177.9	1173.5	1174.2	1175.7	1174.2
5°	1184.4	1181.5	1185.2	1189.5	1192.5	1196.1	1199.8	1200.5	1203.4	1203.4	1202.7
7.5°	1212.9	1210.7	1215.9	1217.3	1223.9	1229.7	1237.0	1242.2	1245.1	1246.5	1248.7
10°	1261.9	1260.4	1261.9	1264.8	1267.7	1274.3	1286.7	1297.7	1304.3	1304.3	1307.2
12.5°	1321.1	1315.2	1316.7	1310.8	1312.3	1326.2	1340.8	1359.1	1370.0	1371.5	1372.9
15°	1367.1	1364.2	1362.0	1354.0	1359.8	1378.1	1400.7	1427.0	1436.5	1444.6	1443.8
17.5°	1410.2	1406.6	1401.4	1390.5	1396.3	1425.6	1459.9	1489.1	1505.2	1506.7	1508.1
20°	1461.4	1457.0	1447.5	1424.8	1423.4	1464.3	1510.3	1541.7	1556.3	1562.9	1565.1
22.5°	1526.4	1520.5	1503.0	1459.2	1447.5	1495.7	1550.5	1589.2	1604.6	1611.2	1614.8
25°	1609.7	1598.0	1570.2	1501.5	1477.4	1527.9	1593.6	1640.4	1661.6	1668.1	1672.5
27.5°	1684.9	1676.2	1642.6	1561.5	1519.8	1571.0	1646.2	1706.1	1735.4	1743.4	1750.0
30°	1772.6	1760.2	1733.2	1647.0	1591.4	1636.7	1732.4	1808.4	1844.2	1845.0	1859.6
32.5°	1978.7	1970.6	1945.8	1850.8	1757.3	1760.2	1849.4	1953.8	1989.6	1995.5	2008.6
35°	2284.1	2281.2	2280.5	2227.8	2158.4	2086.8	2093.4	2173.0	2197.2	2206.7	2211.0
37.5°	2485.0	2510.6	2572.7	2610.7	2593.2	2608.5	2528.2	2431.0	2417.1	2406.9	2411.2
40°	2658.2	2680.9	2806.5	2981.9	3088.6	3163.8	3093.0	2794.9	2683.8	2651.6	2639.2
42.5°	2760.5	2786.1	2965.8	3246.4	3518.2	3696.5	3715.5	3301.2	3019.2	3015.5	2968.8
45°	2816.0	2841.6	3056.4	3434.2	3818.5	4140.0	4306.6	3924.5	3510.2	3479.5	3414.5
47.5°	2805.1	2829.2	3052.8	3503.6	3996.1	4434.5	4767.7	4554.3	4076.5	4002.7	3912.8
50°	2671.4	2688.9	2923.5	3390.4	3948.6	4557.3	5083.3	5132.3	4717.3	4617.2	4482.7
52.5°	2533.3	2564.7	2759.0	3189.4	3733.0	4481.3	5271.9	5658.4	5315.7	5247.0	5074.6
55°	2458.7	2483.6	2642.1	3009.7	3505.8	4221.9	5350.0	6154.5	6042.7	6015.0	5892.9
57.5°	2455.8	2479.9	2606.3	2900.8	3320.9	3951.5	5372.7	6921.0	7249.1	7256.4	7221.3
60°	2575.6	2600.5	2706.4	2953.4	3263.9	3719.9	5291.6	8008.3	8733.1	8797.4	8904.8
62.5°	2592.5	2604.1	2732.0	3065.2	3471.5	3546.7	4957.7	8913.6	9753.1	9812.3	9871.5
65°	2319.2	2318.4	2431.7	2738.6	3428.4	3529.2	4455.7	9024.6	9712.2	9748.0	9821.8
67.5°	1729.5	1714.9	1779.2	2059.8	2720.3	3533.6	3860.9	8186.5	8955.2	9023.2	9048.0
70°	891.4	914.1	957.9	1129.6	1727.3	2844.5	3316.6	6907.1	7861.4	7887.0	7975.4
72.5°	366.1	356.6	386.5	474.9	864.4	1880.0	2743.7	5450.9	6492.8	6475.3	6491.4
75°	203.9	206.8	215.6	247.7	420.1	944.0	2357.2	3858.7	4415.5	4113.0	4021.7
77.5°	163.7	165.1	165.9	171.7	229.4	503.4	1809.2	2541.3	2220.5	2062.0	2001.3
80°	119.8	127.9	136.6	138.1	157.8	285.7	992.3	2139.4	1874.2	1742.7	1634.5
82.5°	96.4	100.1	119.1	122.0	125.7	170.2	449.4	2009.4	1866.9	1732.4	1583.4
85°	57.7	64.3	97.2	97.9	99.4	103.8	248.4	818.4	1017.8	899.5	823.5
87.5°	20.5	26.3	48.2	40.2	51.1	42.4	108.9	274.0	337.6	320.8	284.2
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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1173.5	1173.5	1174.9	1174.2	1174.2	1174.2	1174.2	1172.7	1172.7	1170.5	1172.0
5°	1202.7	1202.0	1202.7	1203.4	1202.7	1204.2	1203.4	1202.7	1203.4	1202.7	1203.4
7.5°	1249.5	1245.8	1250.9	1248.0	1247.3	1251.7	1249.5	1251.7	1252.4	1251.7	1250.9
10°	1308.6	1310.8	1310.8	1310.8	1309.4	1313.8	1314.5	1316.0	1316.7	1319.6	1319.6
12.5°	1376.6	1377.3	1380.3	1379.5	1381.0	1386.1	1389.8	1390.5	1391.2	1393.4	1390.5
15°	1449.7	1451.1	1451.1	1457.7	1455.5	1462.8	1465.0	1465.0	1465.7	1474.5	1475.2
17.5°	1514.7	1514.7	1520.5	1520.5	1526.4	1527.9	1534.4	1535.2	1538.1	1546.1	1546.9
20°	1569.5	1572.4	1576.1	1580.5	1582.7	1587.0	1591.4	1595.8	1599.5	1606.0	1606.8
22.5°	1621.4	1624.3	1630.1	1633.1	1638.2	1641.1	1644.8	1649.9	1655.7	1664.5	1666.7
25°	1681.3	1684.2	1690.8	1695.2	1701.0	1705.4	1712.0	1718.6	1722.2	1731.0	1737.6
27.5°	1757.3	1766.1	1774.8	1777.0	1781.4	1791.6	1800.4	1809.2	1817.2	1821.6	1829.6
30°	1868.3	1868.3	1886.6	1886.6	1894.7	1904.2	1910.0	1919.5	1934.1	1938.5	1948.7
32.5°	2017.4	2021.1	2027.6	2047.4	2062.0	2066.4	2070.7	2084.6	2093.4	2104.4	2116.8
35°	2230.0	2233.7	2237.3	2256.3	2273.1	2277.5	2281.9	2290.7	2305.3	2324.3	2318.4
37.5°	2420.7	2422.9	2434.6	2455.8	2465.3	2477.0	2480.7	2496.7	2504.8	2522.3	2523.0
40°	2650.2	2645.1	2651.6	2675.8	2690.4	2689.6	2701.3	2730.6	2736.4	2744.4	2764.9
42.5°	2970.2	2951.2	2971.7	2979.7	3001.6	3015.5	3038.9	3058.6	3072.5	3103.2	3117.8
45°	3383.8	3364.1	3380.9	3384.5	3429.8	3443.7	3478.8	3505.1	3535.0	3570.1	3580.3
47.5°	3855.1	3818.5	3798.1	3820.7	3874.8	3897.4	3931.8	3956.6	3988.1	4006.3	4000.5
50°	4400.9	4313.2	4272.3	4260.6	4299.3	4331.5	4384.8	4396.5	4411.1	4410.4	4411.1
52.5°	5009.5	4918.2	4832.7	4773.5	4767.7	4810.8	4824.0	4826.9	4822.5	4789.6	4769.2
55°	5804.5	5797.9	5708.1	5585.3	5577.3	5572.2	5495.4	5485.9	5468.4	5418.0	5348.6
57.5°	7246.9	7320.0	7260.8	7257.8	7193.5	7151.2	7010.1	6940.0	6866.2	6729.6	6620.7
60°	8914.3	9020.2	9078.7	9104.3	9230.0	9230.0	9114.5	9015.1	8895.3	8687.1	8483.9
62.5°	9918.3	10011.1	10097.3	10232.4	10392.5	10463.3	10469.2	10380.8	10229.5	9992.1	9704.9
65°	9854.7	9923.4	10027.9	10187.1	10319.4	10446.5	10532.0	10505.0	10389.5	10152.1	9839.3
67.5°	9135.0	9235.1	9370.2	9517.1	9639.9	9759.7	9897.8	9908.0	9877.3	9651.6	9368.8
70°	8024.3	8152.9	8238.4	8423.3	8478.8	8600.1	8738.9	8805.4	8755.7	8581.8	8416.0
72.5°	6519.1	6620.7	6635.3	6554.9	6582.7	6612.7	6646.3	6490.6	6430.7	6198.4	6091.7
75°	3953.0	3819.3	3706.7	3594.9	3261.0	3142.7	2960.7	2602.0	2561.0	2314.8	2143.8
77.5°	1880.0	1823.8	1722.2	1552.0	1325.5	1108.4	919.9	747.5	683.2	562.6	479.3
80°	1573.9	1506.7	1415.3	1288.9	1130.4	972.5	823.5	695.6	567.0	461.8	369.0
82.5°	1443.8	1326.9	1198.3	1089.4	977.7	870.2	770.1	654.7	586.7	473.5	386.5
85°	729.9	639.3	518.1	436.2	368.3	299.6	259.4	221.4	197.3	157.1	136.6
87.5°	244.8	200.2	149.1	126.4	114.0	97.9	89.9	85.5	83.3	73.8	65.8
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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1172.0	1172.0	1172.0	1172.0	1171.3	1171.3	1171.3	1171.3	1171.3	1171.3	1172.0
5°	1202.0	1202.0	1202.7	1204.9	1200.5	1202.0	1203.4	1201.2	1203.4	1201.2	1204.2
7.5°	1250.2	1252.4	1250.9	1253.8	1252.4	1256.8	1253.8	1251.7	1253.1	1253.1	1253.8
10°	1318.1	1321.1	1318.9	1320.3	1320.3	1323.3	1319.6	1320.3	1321.1	1319.6	1320.3
12.5°	1393.4	1394.9	1394.1	1398.5	1396.3	1398.5	1396.3	1399.3	1400.7	1402.2	1402.2
15°	1475.2	1476.7	1481.1	1480.4	1484.7	1483.3	1484.0	1480.4	1487.7	1483.3	1484.7
17.5°	1550.5	1549.8	1555.6	1557.8	1558.5	1559.3	1561.5	1558.5	1559.3	1561.5	1560.0
20°	1609.0	1614.1	1615.5	1621.4	1625.8	1627.2	1626.5	1628.7	1631.6	1628.7	1628.7
22.5°	1671.1	1678.4	1680.6	1684.2	1688.6	1689.3	1693.7	1695.9	1697.4	1696.6	1697.4
25°	1745.6	1750.7	1755.8	1763.1	1768.2	1769.0	1772.6	1775.6	1776.3	1775.6	1779.9
27.5°	1836.9	1843.5	1850.1	1858.9	1864.7	1866.2	1874.2	1874.2	1878.6	1880.8	1882.2
30°	1954.6	1956.8	1973.6	1982.3	1980.1	1990.4	2001.3	2000.6	2005.7	2007.2	2010.8
32.5°	2125.5	2125.5	2140.2	2151.1	2162.8	2159.2	2176.0	2173.0	2181.1	2185.5	2183.3
35°	2333.1	2340.4	2351.3	2357.9	2370.3	2376.9	2388.6	2395.2	2398.8	2398.1	2390.1
37.5°	2547.2	2558.8	2563.2	2579.3	2591.7	2602.7	2604.1	2596.8	2599.8	2585.1	2580.8
40°	2791.9	2808.7	2819.0	2843.1	2841.6	2855.5	2857.0	2835.8	2832.1	2813.1	2793.4
42.5°	3133.9	3157.3	3165.3	3183.6	3169.0	3175.5	3139.0	3130.2	3101.0	3070.3	3025.7
45°	3594.9	3583.3	3588.4	3583.3	3544.5	3516.0	3486.1	3443.0	3399.9	3340.7	3277.1
47.5°	4000.5	4006.3	3968.3	3944.2	3881.4	3841.2	3786.4	3711.1	3658.5	3578.9	3494.8
50°	4394.3	4329.3	4275.9	4220.4	4164.9	4091.1	4008.5	3942.0	3865.3	3765.9	3662.9
52.5°	4714.3	4630.3	4566.0	4487.1	4411.8	4330.0	4243.8	4147.3	4046.5	3947.1	3820.0
55°	5281.4	5159.3	5076.8	4938.7	4853.2	4738.5	4671.2	4546.3	4406.0	4274.5	4139.3
57.5°	6497.9	6315.3	6221.0	6142.8	6009.8	5821.3	5701.5	5496.2	5296.0	5155.7	4930.6
60°	8330.5	8144.9	7988.5	7803.7	7599.8	7344.1	7230.1	6988.2	6701.8	6470.2	6172.8
62.5°	9472.5	9216.1	8962.5	8703.1	8498.5	8298.3	8062.3	7818.3	7534.8	7219.9	6894.7
65°	9518.6	9211.0	8907.7	8643.2	8403.6	8143.4	7922.0	7674.3	7376.2	7051.8	6714.2
67.5°	9040.7	8696.6	8371.4	8081.3	7807.3	7566.2	7334.6	7101.5	6782.2	6510.4	6164.7
70°	8088.6	7774.4	7480.0	7149.7	6940.0	6668.9	6443.1	6197.6	5968.9	5714.7	5391.0
72.5°	5941.2	5704.4	5368.3	5228.0	5115.5	4828.3	4660.3	4639.8	4493.7	4189.0	3947.1
75°	2209.6	1880.8	1781.4	1840.6	1741.9	1774.8	1762.4	1692.3	1695.2	1643.3	1581.9
77.5°	432.6	401.9	377.8	384.3	357.3	345.6	370.5	363.1	350.0	353.6	347.8
80°	294.5	249.2	225.8	217.0	206.1	200.9	199.5	197.3	192.9	190.7	184.1
82.5°	290.1	215.6	170.2	146.1	137.4	133.0	129.3	128.6	127.1	126.4	128.6
85°	115.4	93.5	85.5	78.2	76.0	73.8	73.8	73.1	72.3	73.8	76.7
87.5°	56.3	47.5	43.1	39.5	38.0	37.3	37.3	38.0	38.7	41.6	47.5
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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1170.5	1171.3	1169.8	1170.5	1169.8	1168.4	1167.6	1169.8	1169.1	1168.4	1168.4
5°	1200.5	1203.4	1202.0	1200.5	1200.5	1199.8	1199.8	1199.8	1199.0	1199.8	1197.6
7.5°	1252.4	1251.7	1251.7	1250.2	1248.7	1250.2	1249.5	1247.3	1248.0	1246.5	1244.3
10°	1318.9	1316.7	1320.3	1320.3	1317.4	1316.7	1315.2	1313.0	1313.0	1310.8	1310.8
12.5°	1397.8	1395.6	1400.7	1397.1	1392.7	1391.9	1387.6	1386.1	1388.3	1387.6	1386.1
15°	1478.2	1478.9	1481.1	1480.4	1475.2	1475.2	1469.4	1470.1	1465.7	1464.3	1460.6
17.5°	1556.3	1557.1	1554.9	1554.9	1551.2	1549.0	1542.5	1543.2	1540.3	1534.4	1530.0
20°	1626.5	1625.8	1620.6	1625.0	1617.7	1616.3	1610.4	1604.6	1606.0	1600.2	1591.4
22.5°	1695.2	1693.7	1692.3	1690.1	1686.4	1684.9	1678.4	1677.6	1670.3	1661.6	1654.3
25°	1774.8	1774.1	1771.9	1772.6	1765.3	1766.1	1754.4	1751.4	1747.1	1737.6	1731.7
27.5°	1877.8	1877.8	1872.0	1869.8	1867.6	1864.7	1854.5	1847.2	1836.2	1825.2	1813.5
30°	2004.3	2002.8	2001.3	1995.5	1987.5	1983.1	1964.8	1953.1	1938.5	1918.0	1900.5
32.5°	2184.7	2172.3	2162.1	2148.9	2135.8	2121.9	2093.4	2073.7	2050.3	2017.4	1989.6
35°	2385.7	2364.5	2353.5	2326.5	2301.6	2273.9	2239.5	2199.3	2167.2	2124.1	2078.8
37.5°	2551.5	2535.5	2506.2	2475.5	2440.5	2387.9	2349.1	2306.0	2249.8	2202.3	2147.5
40°	2756.1	2719.6	2677.9	2626.8	2578.6	2519.4	2466.0	2403.9	2335.3	2266.6	2195.0
42.5°	2970.9	2914.7	2846.0	2786.8	2713.7	2636.3	2566.9	2482.9	2395.2	2303.1	2207.4
45°	3190.2	3120.7	3029.4	2945.4	2843.8	2746.6	2647.3	2532.5	2412.7	2290.0	2169.4
47.5°	3391.1	3289.5	3185.8	3072.5	2955.6	2830.7	2689.6	2539.1	2381.3	2219.8	2069.3
50°	3548.9	3421.8	3291.0	3160.2	3017.0	2854.8	2677.2	2480.7	2286.3	2092.7	1919.5
52.5°	3688.5	3546.0	3385.2	3223.0	3046.2	2846.7	2624.6	2393.0	2156.2	1942.1	1747.8
55°	3958.8	3779.8	3567.9	3358.9	3135.3	2884.0	2607.1	2323.6	2051.0	1817.9	1611.2
57.5°	4693.2	4451.3	4123.2	3833.1	3549.6	3183.6	2793.4	2444.1	2097.1	1821.6	1591.4
60°	5849.8	5456.0	5080.4	4638.4	4179.5	3677.5	3154.3	2683.8	2260.7	1915.1	1638.2
62.5°	6520.6	6104.8	5621.9	5086.3	4491.5	3879.9	3279.3	2729.8	2265.8	1889.5	1582.7
65°	6339.4	5921.4	5390.2	4842.2	4209.4	3584.0	2987.8	2460.2	2010.1	1662.3	1368.6
67.5°	5801.6	5364.7	4865.6	4257.7	3652.7	3073.2	2529.6	2032.8	1634.5	1310.1	1050.7
70°	5019.0	4630.3	4149.5	3589.1	3002.4	2481.4	2023.3	1575.3	1238.5	941.1	736.5
72.5°	3725.0	3380.9	3080.5	2612.2	2182.5	1774.1	1400.7	1096.0	805.9	609.4	469.1
75°	1563.7	1447.5	1398.5	1226.8	1066.8	874.6	658.3	524.6	425.3	361.7	287.2
77.5°	379.2	379.2	356.6	333.9	306.9	277.7	245.5	219.2	206.1	194.4	184.9
80°	184.1	182.7	176.8	176.1	171.0	164.4	160.7	155.6	153.4	150.5	149.1
82.5°	129.3	128.6	126.4	129.3	128.6	131.5	133.0	133.7	133.7	134.4	135.2
85°	81.8	84.8	90.6	97.9	104.5	112.5	119.8	125.7	130.1	133.7	136.6
87.5°	51.9	59.2	63.6	74.5	85.5	97.9	111.8	117.6	122.8	123.5	119.1
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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1168.4	1167.6	1169.1	1167.6	1167.6	1166.9	1164.7	1162.5	1160.3	1159.6	1157.4
5°	1196.9	1196.9	1198.3	1195.4	1196.1	1193.2	1186.6	1179.3	1172.7	1166.9	1160.3
7.5°	1245.1	1242.9	1243.6	1242.9	1241.4	1235.6	1221.0	1202.7	1185.2	1166.9	1152.3
10°	1309.4	1305.0	1305.0	1303.5	1301.3	1293.3	1262.6	1226.1	1189.5	1156.7	1132.6
12.5°	1381.0	1381.7	1375.9	1372.2	1368.6	1351.8	1305.7	1247.3	1189.5	1136.9	1098.2
15°	1455.5	1454.8	1448.2	1446.0	1438.0	1413.1	1343.7	1258.2	1175.7	1098.2	1040.5
17.5°	1522.7	1519.8	1513.2	1508.9	1500.1	1467.2	1369.3	1253.1	1139.1	1037.6	965.2
20°	1584.1	1580.5	1574.6	1566.6	1557.8	1510.3	1378.8	1226.8	1081.4	965.2	892.2
22.5°	1647.7	1639.6	1633.1	1622.1	1612.6	1549.0	1372.2	1180.0	1015.6	884.9	806.7
25°	1718.6	1709.1	1695.2	1682.0	1667.4	1580.5	1354.0	1121.6	936.7	797.9	719.0
27.5°	1795.3	1781.4	1763.1	1746.3	1722.9	1603.8	1322.5	1056.6	850.5	711.7	629.8
30°	1876.4	1850.8	1828.2	1802.6	1772.6	1614.8	1277.2	976.2	755.5	624.0	542.2
32.5°	1955.3	1921.0	1887.3	1850.1	1809.2	1610.4	1212.9	881.2	660.5	542.2	473.5
35°	2035.7	1986.0	1939.2	1888.8	1839.1	1588.5	1124.5	776.0	570.7	474.2	424.5
37.5°	2090.5	2028.4	1966.3	1905.6	1845.7	1541.0	1006.9	658.3	489.6	425.3	389.5
40°	2118.2	2042.3	1966.3	1891.0	1817.2	1462.1	869.5	550.9	431.8	388.7	363.1
42.5°	2110.2	2015.9	1921.7	1832.5	1741.9	1336.4	720.5	462.5	391.6	360.2	337.6
45°	2043.7	1931.2	1823.8	1729.5	1616.3	1174.9	591.9	407.7	361.0	336.8	315.7
47.5°	1918.8	1793.1	1661.6	1554.9	1448.9	987.9	492.5	373.4	333.9	314.2	293.0
50°	1759.5	1614.1	1482.6	1367.1	1263.3	813.2	424.5	344.2	312.0	295.2	272.5
52.5°	1584.1	1427.7	1307.9	1186.6	1085.1	678.8	377.0	312.0	290.8	273.3	255.0
55°	1438.7	1294.0	1172.0	1050.0	947.7	594.0	337.6	287.2	271.1	252.8	238.2
57.5°	1400.0	1234.8	1101.9	986.4	881.2	542.2	309.1	264.5	253.5	239.7	223.6
60°	1416.1	1234.1	1085.1	958.7	848.3	500.5	287.9	249.2	240.4	228.0	211.2
62.5°	1358.3	1166.2	1015.6	881.2	776.7	447.9	272.5	241.9	236.0	219.2	200.2
65°	1157.4	981.3	836.6	720.5	630.6	377.0	260.1	248.4	242.6	213.4	192.9
67.5°	881.2	734.3	618.2	531.2	466.2	312.0	257.2	270.4	258.7	216.3	190.7
70°	609.4	498.3	423.8	371.2	330.3	263.0	266.7	294.5	277.7	225.8	203.1
72.5°	386.5	323.0	286.4	266.7	247.0	222.1	264.5	291.5	268.9	227.2	203.1
75°	247.7	221.4	209.0	201.7	195.8	193.6	233.1	239.7	216.3	197.3	189.2
77.5°	175.4	171.0	168.8	168.1	168.8	173.9	192.9	180.5	157.1	157.8	162.2
80°	148.3	148.3	146.9	147.6	149.1	151.3	154.2	133.0	120.6	130.1	144.7
82.5°	135.9	138.1	139.6	141.0	143.2	140.3	130.8	100.8	97.2	126.4	141.8
85°	138.1	138.1	138.8	140.3	141.0	126.4	108.9	76.0	74.5	141.8	133.7
87.5°	118.4	116.9	111.8	108.1	103.0	87.0	72.3	42.4	43.8	87.7	93.5
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: P177427

CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1162.5	1162.5
2.5°	1156.7	1156.7
5°	1156.7	1156.7
7.5°	1147.2	1144.2
10°	1119.4	1115.7
12.5°	1077.0	1073.4
15°	1012.0	1007.6
17.5°	930.9	923.6
20°	846.1	835.9
22.5°	761.4	753.3
25°	674.4	667.1
27.5°	588.9	581.6
30°	510.0	507.1
32.5°	451.6	448.6
35°	408.5	407.0
37.5°	379.2	377.8
40°	353.6	352.2
42.5°	330.3	328.1
45°	306.9	307.6
47.5°	283.5	282.8
50°	263.0	263.0
52.5°	246.2	245.5
55°	230.9	230.2
57.5°	215.6	214.8
60°	202.4	200.2
62.5°	190.0	188.5
65°	181.9	181.2
67.5°	176.1	173.9
70°	174.6	168.8
72.5°	170.2	162.9
75°	160.0	156.4
77.5°	141.0	136.6
80°	108.9	100.8
82.5°	91.3	78.9
85°	67.2	62.1
87.5°	49.0	38.7
90°	0.0	0.0

(END OF REPORT)