

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: P177429

Luminaire Tested: **VAL-E04-LED-E-U-GL2-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177429
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-GL2-7050
Description: VALET TUNNEL LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE II W/ GLARE CONTROL
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12017.7 lumens
Efficiency: N/A
Efficacy: 123.6 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



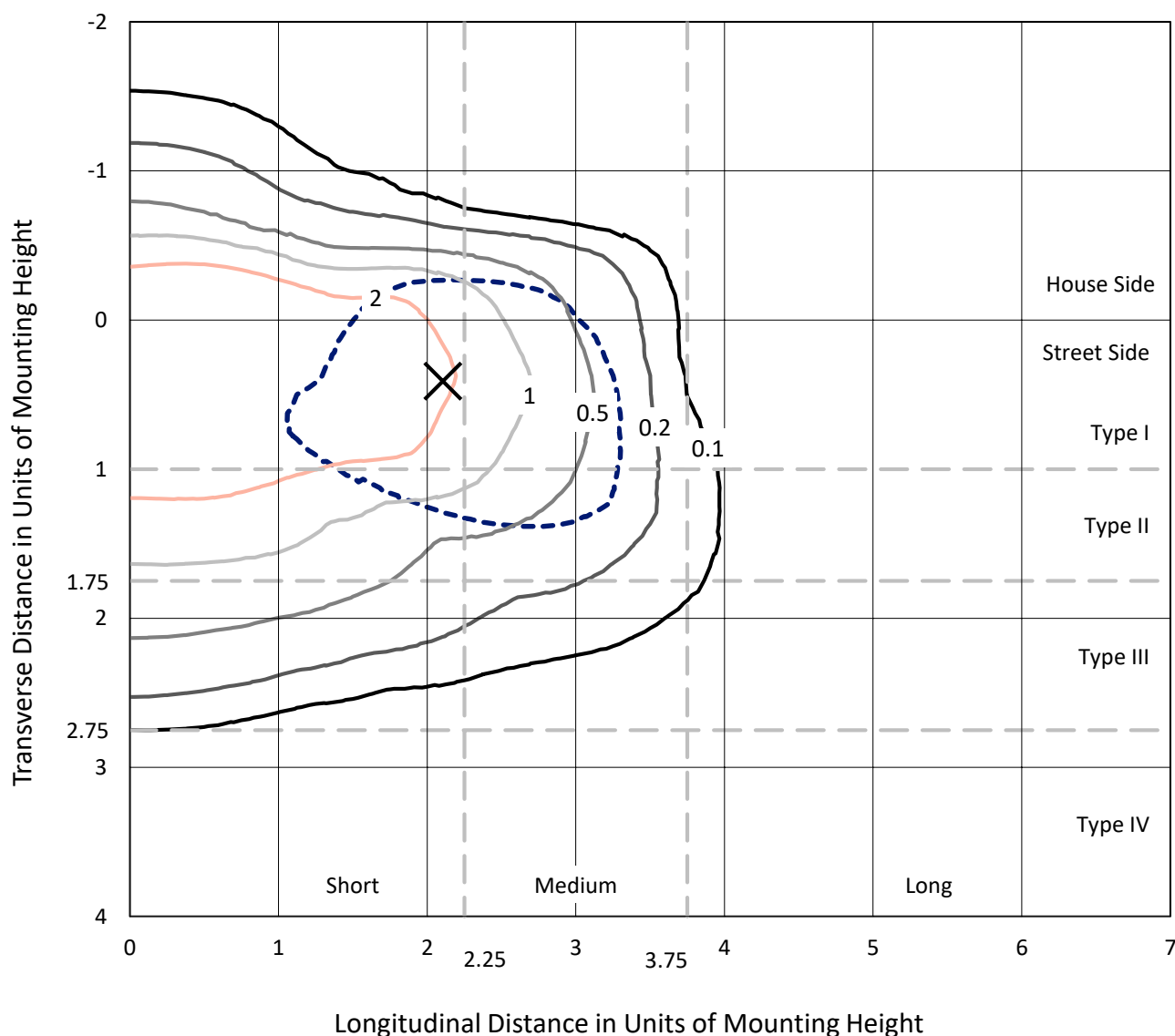
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

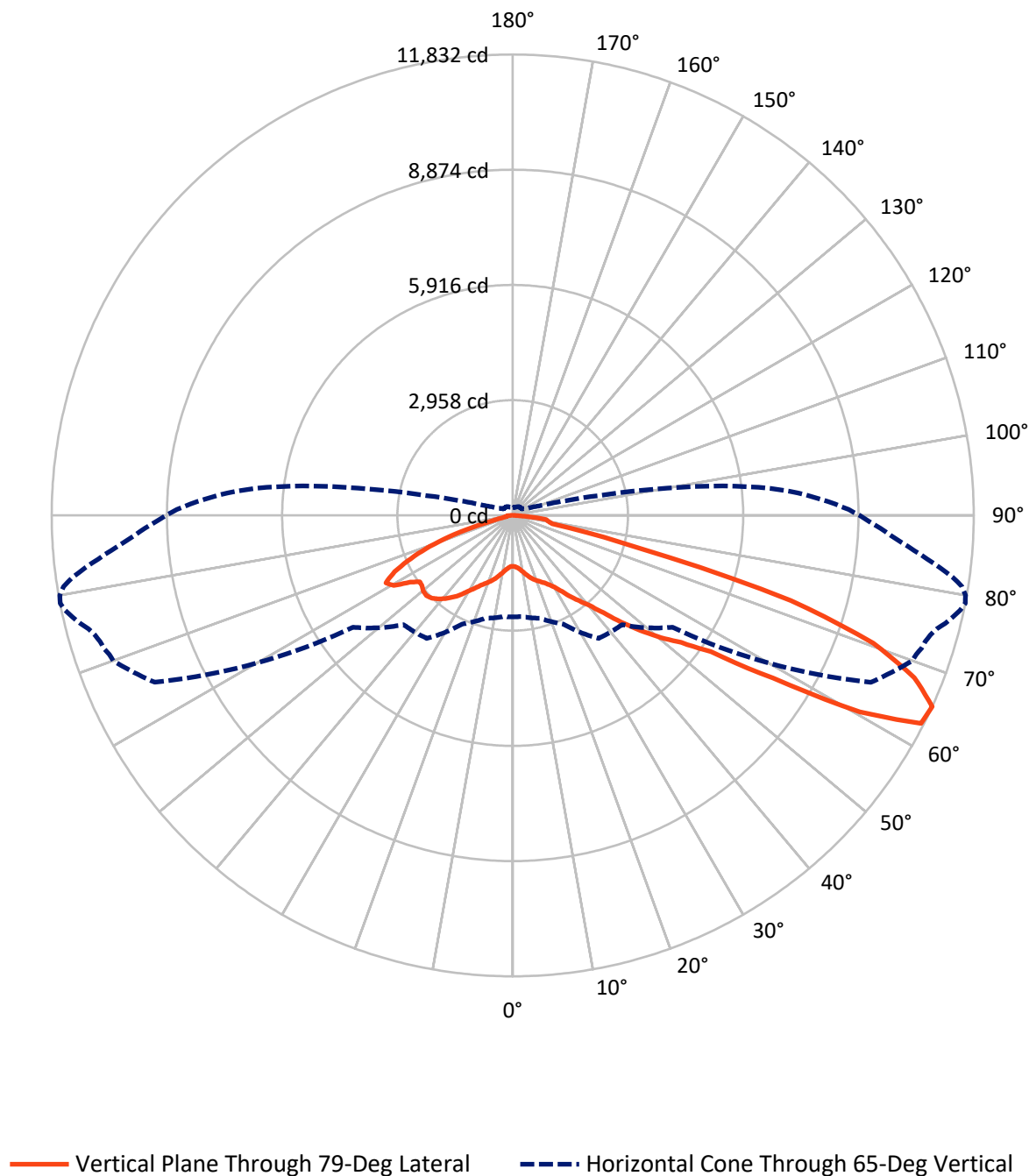


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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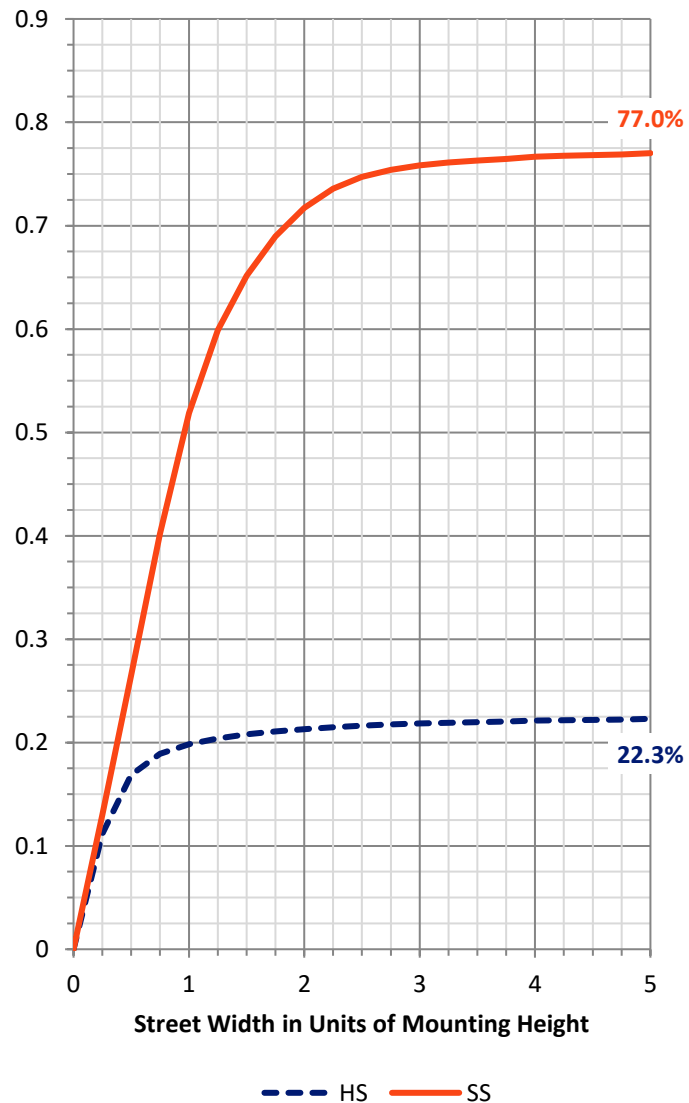
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2727.9	0.0	2727.9
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	9289.8	0.0	9289.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	12017.7	0.0	12017.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	1.1
10°-20°	422.0	3.5
20°-30°	727.5	6.1
30°-40°	1186.4	9.9
40°-50°	1980.6	16.5
50°-60°	2678.1	22.3
60°-70°	3327.0	27.7
70°-80°	1332.2	11.1
80°-90°	234.1	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°	12017.7	100.0
0°-180°	12017.7	100.0

Coefficient of Utilization



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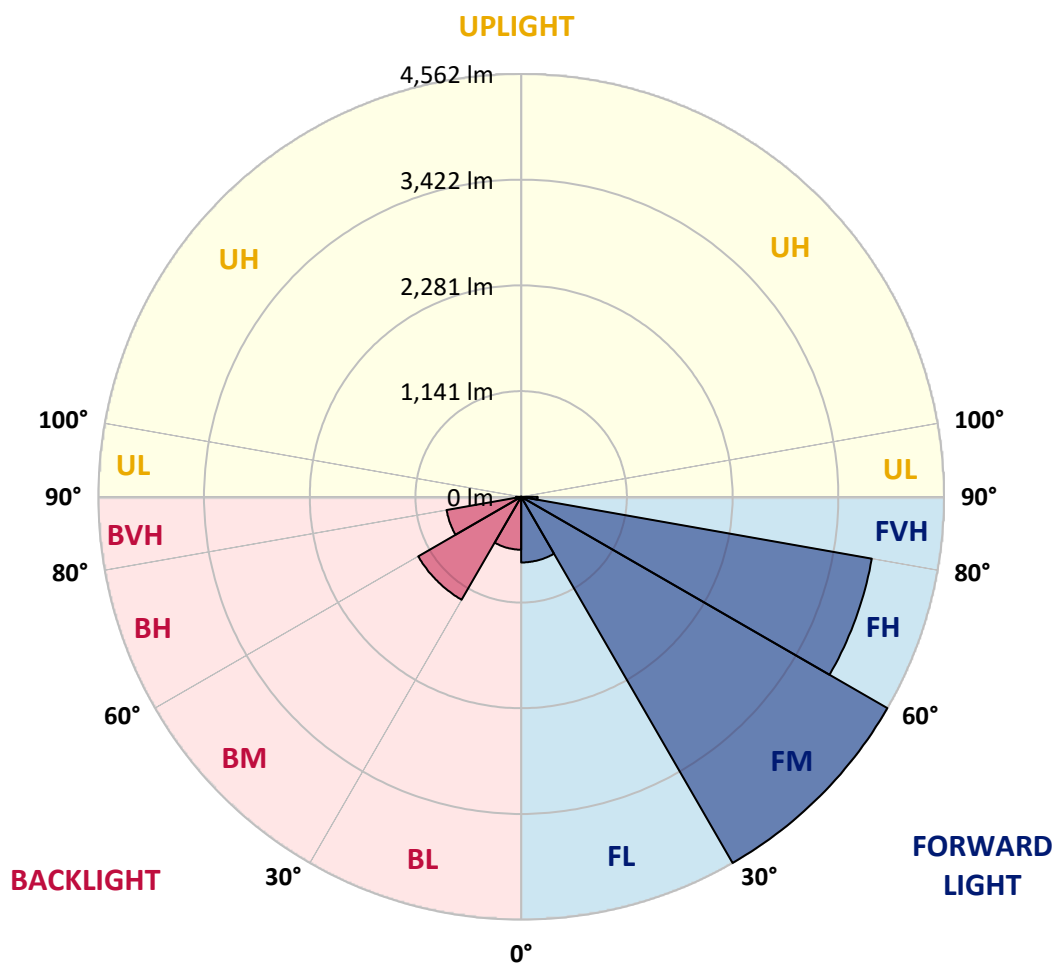
CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	708.6	5.9			
FM	(30°-60°)	4562.1	38.0			
FH	(60°-80°)	3841.5	32.0			G2/5000
FVH	(80°-90°)	177.6	1.5			G2/225
BL	(0°-30°)	570.5	4.7	B2/1000		
BM	(30°-60°)	1283.0	10.7	B2/2500		
BH	(60°-80°)	817.8	6.8	B2/1000		G2/1000
BVH	(80°-90°)	56.5	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°	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1315.9	1315.1	1319.2	1322.4	1322.4	1324.1	1323.3	1318.3	1319.2	1320.8	1319.2
5°	1330.7	1327.4	1331.5	1336.4	1339.7	1343.8	1347.9	1348.7	1352.0	1352.0	1351.2
7.5°	1362.7	1360.2	1366.0	1367.6	1375.0	1381.5	1389.8	1395.5	1398.8	1400.4	1402.9
10°	1417.7	1416.0	1417.7	1421.0	1424.2	1431.6	1445.6	1457.9	1465.3	1465.3	1468.6
12.5°	1484.2	1477.6	1479.2	1472.7	1474.3	1489.9	1506.3	1526.8	1539.2	1540.8	1542.4
15°	1535.9	1532.6	1530.1	1521.1	1527.7	1548.2	1573.6	1603.2	1613.9	1622.9	1622.1
17.5°	1584.3	1580.2	1574.5	1562.1	1568.7	1601.5	1640.1	1673.0	1691.0	1692.7	1694.3
20°	1641.8	1636.8	1626.2	1600.7	1599.1	1645.1	1696.8	1732.1	1748.5	1755.9	1758.3
22.5°	1714.8	1708.3	1688.6	1639.3	1626.2	1680.4	1741.9	1785.4	1802.7	1810.0	1814.2
25°	1808.4	1795.3	1764.1	1686.9	1659.8	1716.5	1790.3	1842.9	1866.7	1874.1	1879.0
27.5°	1893.0	1883.1	1845.3	1754.2	1707.4	1764.9	1849.5	1916.8	1949.6	1958.6	1966.0
30°	1991.5	1977.5	1947.1	1850.3	1787.9	1838.8	1946.3	2031.7	2071.9	2072.7	2089.2
32.5°	2223.0	2213.9	2186.0	2079.3	1974.2	1977.5	2077.7	2195.0	2235.3	2241.8	2256.6
35°	2566.1	2562.8	2562.0	2502.9	2424.9	2344.4	2351.8	2441.3	2468.4	2479.1	2484.0
37.5°	2791.8	2820.6	2890.3	2933.0	2913.3	2930.6	2840.3	2731.1	2715.5	2704.0	2708.9
40°	2986.4	3011.8	3153.0	3350.0	3469.9	3554.4	3474.8	3139.9	3015.1	2979.0	2965.0
42.5°	3101.3	3130.0	3332.0	3647.2	3952.6	4152.9	4174.2	3708.8	3391.9	3387.8	3335.3
45°	3163.7	3192.4	3433.8	3858.2	4289.9	4651.1	4838.3	4409.0	3943.5	3909.1	3836.0
47.5°	3151.4	3178.5	3429.7	3936.1	4489.4	4981.9	5356.3	5116.6	4579.7	4496.8	4395.8
50°	3001.2	3020.9	3284.4	3808.9	4436.1	5119.9	5710.9	5765.9	5299.6	5187.2	5036.1
52.5°	2846.0	2881.3	3099.7	3583.2	4193.9	5034.5	5922.7	6356.9	5971.9	5894.8	5701.0
55°	2762.3	2790.2	2968.3	3381.2	3938.6	4743.1	6010.5	6914.3	6788.7	6757.5	6620.4
57.5°	2759.0	2786.1	2928.1	3258.9	3730.9	4439.3	6036.0	7775.4	8144.0	8152.2	8112.8
60°	2893.6	2921.5	3040.6	3318.0	3666.9	4179.1	5944.8	8996.9	9811.2	9883.4	10004.1
62.5°	2912.5	2925.6	3069.3	3443.6	3900.0	3984.6	5569.7	10014.0	10957.2	11023.7	11090.1
65°	2605.5	2604.7	2731.9	3076.7	3851.6	3964.9	5005.8	10138.7	10911.2	10951.4	11034.3
67.5°	1943.0	1926.6	1998.9	2314.1	3056.2	3969.8	4337.6	9197.2	10060.8	10137.1	10165.0
70°	1001.5	1026.9	1076.2	1269.1	1940.6	3195.7	3726.0	7759.8	8831.9	8860.6	8960.0
72.5°	411.3	400.6	434.2	533.6	971.1	2112.1	3082.4	6123.8	7294.4	7274.7	7292.7
75°	229.0	232.3	242.2	278.3	472.0	1060.6	2648.2	4335.1	4960.6	4620.8	4518.1
77.5°	183.9	185.5	186.3	192.9	257.8	565.6	2032.5	2855.0	2494.7	2316.5	2248.4
80°	134.6	143.7	153.5	155.1	177.3	321.0	1114.8	2403.5	2105.6	1957.8	1836.3
82.5°	108.4	112.5	133.8	137.1	141.2	191.3	504.8	2257.4	2097.4	1946.3	1778.9
85°	64.8	72.2	109.2	110.0	111.6	116.6	279.1	919.4	1143.5	1010.5	925.1
87.5°	23.0	29.6	54.2	45.1	57.5	47.6	122.3	307.8	379.2	360.4	319.3
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-E04-LED-E-U-GL2-7050

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1318.3	1318.3	1320.0	1319.2	1319.2	1319.2	1319.2	1317.5	1317.5	1315.1	1316.7
5°	1351.2	1350.4	1351.2	1352.0	1351.2	1352.8	1352.0	1351.2	1352.0	1351.2	1352.0
7.5°	1403.7	1399.6	1405.4	1402.1	1401.2	1406.2	1403.7	1406.2	1407.0	1406.2	1405.4
10°	1470.2	1472.7	1472.7	1472.7	1471.0	1476.0	1476.8	1478.4	1479.2	1482.5	1482.5
12.5°	1546.5	1547.4	1550.7	1549.8	1551.5	1557.2	1561.3	1562.1	1563.0	1565.4	1562.1
15°	1628.6	1630.3	1630.3	1637.7	1635.2	1643.4	1645.9	1645.9	1646.7	1656.5	1657.4
17.5°	1701.7	1701.7	1708.3	1708.3	1714.8	1716.5	1723.9	1724.7	1728.0	1737.0	1737.8
20°	1763.3	1766.5	1770.6	1775.6	1778.0	1783.0	1787.9	1792.8	1796.9	1804.3	1805.1
22.5°	1821.5	1824.8	1831.4	1834.7	1840.4	1843.7	1847.8	1853.6	1860.1	1870.0	1872.4
25°	1888.9	1892.1	1899.5	1904.5	1911.0	1915.9	1923.3	1930.7	1934.8	1944.7	1952.1
27.5°	1974.2	1984.1	1993.9	1996.4	2001.3	2012.8	2022.7	2032.5	2041.5	2046.5	2055.5
30°	2099.0	2099.0	2119.5	2119.5	2128.6	2139.2	2145.8	2156.5	2172.9	2177.8	2189.3
32.5°	2266.5	2270.6	2278.0	2300.1	2316.5	2321.5	2326.4	2342.0	2351.8	2364.1	2378.1
35°	2505.3	2509.4	2513.5	2534.9	2553.8	2558.7	2563.6	2573.5	2589.9	2611.2	2604.7
37.5°	2719.6	2722.1	2735.2	2759.0	2769.7	2782.8	2786.9	2805.0	2814.0	2833.7	2834.5
40°	2977.3	2971.6	2979.0	3006.1	3022.5	3021.7	3034.8	3067.6	3074.2	3083.2	3106.2
42.5°	3336.9	3315.6	3338.5	3347.6	3372.2	3387.8	3414.1	3436.2	3451.8	3486.3	3502.7
45°	3801.5	3779.4	3798.2	3802.3	3853.2	3868.8	3908.2	3937.8	3971.4	4010.8	4022.3
47.5°	4331.0	4289.9	4267.0	4292.4	4353.1	4378.6	4417.2	4445.1	4480.4	4500.9	4494.3
50°	4944.2	4845.7	4799.7	4786.6	4830.1	4866.2	4926.1	4939.3	4955.7	4954.9	4955.7
52.5°	5628.0	5525.4	5429.3	5362.8	5356.3	5404.7	5419.5	5422.8	5417.8	5380.9	5357.9
55°	6521.1	6513.7	6412.7	6274.8	6265.8	6260.1	6173.9	6163.2	6143.5	6086.9	6008.9
57.5°	8141.5	8223.6	8157.1	8153.8	8081.6	8034.0	7875.6	7796.8	7713.9	7560.3	7438.0
60°	10014.8	10133.8	10199.5	10228.2	10369.4	10369.4	10239.7	10128.1	9993.4	9759.5	9531.3
62.5°	11142.7	11246.9	11343.8	11495.7	11675.4	11755.1	11761.6	11662.3	11492.4	11225.6	10903.0
65°	11071.3	11148.4	11265.8	11444.8	11593.3	11736.2	11832.2	11801.9	11672.2	11405.4	11054.0
67.5°	10262.7	10375.2	10527.0	10692.0	10829.9	10964.6	11119.7	11131.2	11096.7	10843.1	10525.4
70°	9015.0	9159.4	9255.5	9463.2	9525.5	9661.8	9817.8	9892.5	9836.7	9641.3	9454.9
72.5°	7323.9	7438.0	7454.5	7364.2	7395.3	7429.0	7466.8	7291.9	7224.6	6963.6	6843.7
75°	4441.0	4290.8	4164.3	4038.8	3663.6	3530.6	3326.2	2923.2	2877.2	2600.6	2408.5
77.5°	2112.1	2048.9	1934.8	1743.6	1489.1	1245.3	1033.5	839.8	767.5	632.1	538.5
80°	1768.2	1692.7	1590.1	1448.0	1269.9	1092.6	925.1	781.5	637.0	518.8	414.5
82.5°	1622.1	1490.7	1346.3	1223.9	1098.3	977.7	865.2	735.5	659.2	531.9	434.2
85°	820.1	718.3	582.0	490.1	413.7	336.6	291.4	248.7	221.6	176.5	153.5
87.5°	275.0	224.9	167.5	142.0	128.1	110.0	101.0	96.0	93.6	82.9	73.9
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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CANDELA DISTRIBUTION (continued):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1316.7	1316.7	1316.7	1316.7	1315.9	1315.9	1315.9	1315.9	1315.9	1315.9	1316.7
5°	1350.4	1350.4	1351.2	1353.6	1348.7	1350.4	1352.0	1349.5	1352.0	1349.5	1352.8
7.5°	1404.5	1407.0	1405.4	1408.6	1407.0	1411.9	1408.6	1406.2	1407.8	1407.8	1408.6
10°	1480.9	1484.2	1481.7	1483.3	1483.3	1486.6	1482.5	1483.3	1484.2	1482.5	1483.3
12.5°	1565.4	1567.1	1566.2	1571.2	1568.7	1571.2	1568.7	1572.0	1573.6	1575.3	1575.3
15°	1657.4	1659.0	1663.9	1663.1	1668.0	1666.4	1667.2	1663.1	1671.3	1666.4	1668.0
17.5°	1741.9	1741.1	1747.7	1750.1	1750.9	1751.8	1754.2	1750.9	1751.8	1754.2	1752.6
20°	1807.6	1813.3	1815.0	1821.5	1826.5	1828.1	1827.3	1829.8	1833.0	1829.8	1829.8
22.5°	1877.4	1885.6	1888.0	1892.1	1897.1	1897.9	1902.8	1905.3	1906.9	1906.1	1906.9
25°	1961.1	1966.8	1972.6	1980.8	1986.5	1987.4	1991.5	1994.7	1995.6	1994.7	1999.7
27.5°	2063.7	2071.1	2078.5	2088.3	2094.9	2096.5	2105.6	2105.6	2110.5	2113.0	2114.6
30°	2195.9	2198.3	2217.2	2227.1	2224.6	2236.1	2248.4	2247.6	2253.3	2255.0	2259.1
32.5°	2388.0	2388.0	2404.4	2416.7	2429.8	2425.7	2444.6	2441.3	2450.3	2455.3	2452.8
35°	2621.1	2629.3	2641.6	2649.0	2662.9	2670.3	2683.5	2690.9	2695.0	2694.1	2685.1
37.5°	2861.6	2874.7	2879.7	2897.7	2911.7	2924.0	2925.6	2917.4	2920.7	2904.3	2899.4
40°	3136.6	3155.5	3167.0	3194.1	3192.4	3208.0	3209.7	3185.9	3181.7	3160.4	3138.2
42.5°	3520.8	3547.0	3556.1	3576.6	3560.2	3567.6	3526.5	3516.7	3483.8	3449.4	3399.3
45°	4038.8	4025.6	4031.4	4025.6	3982.1	3950.1	3916.4	3868.0	3819.6	3753.1	3681.7
47.5°	4494.3	4500.9	4458.2	4431.1	4360.5	4315.4	4253.8	4169.3	4110.2	4020.7	3926.3
50°	4936.8	4863.7	4803.8	4741.4	4679.0	4596.1	4503.4	4428.7	4342.5	4230.8	4115.1
52.5°	5296.3	5201.9	5129.7	5041.1	4956.5	4864.6	4767.7	4659.3	4546.1	4434.4	4291.6
55°	5933.4	5796.3	5703.5	5548.4	5452.3	5323.4	5247.9	5107.5	4949.9	4802.2	4650.3
57.5°	7300.1	7094.9	6989.0	6901.2	6751.8	6540.0	6405.4	6174.7	5949.8	5792.2	5539.3
60°	9358.9	9150.4	8974.7	8767.0	8538.0	8250.7	8122.7	7850.9	7529.2	7268.9	6934.8
62.5°	10641.9	10353.8	10069.0	9777.6	9547.7	9322.8	9057.6	8783.5	8465.0	8111.2	7745.9
65°	10693.7	10348.1	10007.4	9710.2	9441.0	9148.8	8900.0	8621.7	8286.8	7922.4	7543.1
67.5°	10156.8	9770.2	9404.9	9079.0	8771.1	8500.3	8240.0	7978.2	7619.4	7314.1	6925.8
70°	9087.2	8734.2	8403.4	8032.4	7796.8	7492.2	7238.6	6962.7	6705.8	6420.1	6056.5
72.5°	6674.6	6408.6	6031.0	5873.4	5747.0	5424.4	5235.6	5212.6	5048.4	4706.1	4434.4
75°	2482.4	2113.0	2001.3	2067.8	1957.0	1993.9	1980.0	1901.2	1904.5	1846.2	1777.2
77.5°	486.0	451.5	424.4	431.8	401.4	388.3	416.2	408.0	393.2	397.3	390.7
80°	330.8	279.9	253.7	243.8	231.5	225.7	224.1	221.6	216.7	214.3	206.9
82.5°	325.9	242.2	191.3	164.2	154.3	149.4	145.3	144.5	142.8	142.0	144.5
85°	129.7	105.1	96.0	87.8	85.4	82.9	82.9	82.1	81.3	82.9	86.2
87.5°	63.2	53.4	48.4	44.3	42.7	41.9	41.9	42.7	43.5	46.8	53.4
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-E04-LED-E-U-GL2-7050

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1315.1	1315.9	1314.2	1315.1	1314.2	1312.6	1311.8	1314.2	1313.4	1312.6	1312.6
5°	1348.7	1352.0	1350.4	1348.7	1348.7	1347.9	1347.9	1347.9	1347.1	1347.9	1345.4
7.5°	1407.0	1406.2	1406.2	1404.5	1402.9	1404.5	1403.7	1401.2	1402.1	1400.4	1398.0
10°	1481.7	1479.2	1483.3	1483.3	1480.1	1479.2	1477.6	1475.1	1475.1	1472.7	1472.7
12.5°	1570.4	1567.9	1573.6	1569.5	1564.6	1563.8	1558.9	1557.2	1559.7	1558.9	1557.2
15°	1660.6	1661.5	1663.9	1663.1	1657.4	1657.4	1650.8	1651.6	1646.7	1645.1	1640.9
17.5°	1748.5	1749.3	1746.8	1746.8	1742.7	1740.3	1732.9	1733.7	1730.4	1723.9	1718.9
20°	1827.3	1826.5	1820.7	1825.6	1817.4	1815.8	1809.2	1802.7	1804.3	1797.7	1787.9
22.5°	1904.5	1902.8	1901.2	1898.7	1894.6	1893.0	1885.6	1884.8	1876.5	1866.7	1858.5
25°	1993.9	1993.1	1990.6	1991.5	1983.3	1984.1	1970.9	1967.7	1962.7	1952.1	1945.5
27.5°	2109.7	2109.7	2103.1	2100.6	2098.2	2094.9	2083.4	2075.2	2062.9	2050.6	2037.4
30°	2251.7	2250.0	2248.4	2241.8	2232.8	2227.9	2207.4	2194.2	2177.8	2154.8	2135.1
32.5°	2454.4	2440.5	2429.0	2414.2	2399.4	2383.8	2351.8	2329.7	2303.4	2266.5	2235.3
35°	2680.2	2656.4	2644.1	2613.7	2585.8	2554.6	2516.0	2470.9	2434.7	2386.3	2335.4
37.5°	2866.5	2848.5	2815.6	2781.2	2741.8	2682.7	2639.1	2590.7	2527.5	2474.1	2412.6
40°	3096.4	3055.3	3008.5	2951.1	2896.9	2830.4	2770.5	2700.7	2623.5	2546.4	2465.9
42.5°	3337.7	3274.5	3197.3	3130.9	3048.8	2961.8	2883.8	2789.4	2690.9	2587.4	2479.9
45°	3584.0	3506.0	3403.4	3309.0	3194.9	3085.7	2974.1	2845.2	2710.6	2572.7	2437.2
47.5°	3809.7	3695.6	3579.1	3451.8	3320.5	3180.1	3021.7	2852.6	2675.3	2493.8	2324.7
50°	3987.0	3844.2	3697.3	3550.3	3389.4	3207.2	3007.7	2786.9	2568.5	2351.0	2156.5
52.5°	4143.8	3983.8	3803.2	3620.9	3422.3	3198.2	2948.6	2688.4	2422.4	2181.9	1963.6
55°	4447.6	4246.4	4008.4	3773.6	3522.4	3240.0	2928.9	2610.4	2304.2	2042.4	1810.0
57.5°	5272.5	5000.8	4632.3	4306.4	3987.9	3576.6	3138.2	2745.9	2355.9	2046.5	1787.9
60°	6572.0	6129.5	5707.6	5211.0	4695.5	4131.5	3543.8	3015.1	2539.8	2151.5	1840.4
62.5°	7325.6	6858.5	6315.9	5714.2	5046.0	4358.9	3684.1	3066.8	2545.6	2122.8	1778.0
65°	7122.0	6652.4	6055.7	5440.0	4729.1	4026.4	3356.6	2763.9	2258.3	1867.5	1537.5
67.5°	6517.8	6026.9	5466.3	4783.3	4103.6	3452.6	2841.9	2283.7	1836.3	1471.8	1180.4
70°	5638.7	5201.9	4661.8	4032.2	3373.0	2787.7	2273.0	1769.8	1391.4	1057.3	827.5
72.5°	4184.9	3798.2	3460.8	2934.7	2452.0	1993.1	1573.6	1231.3	905.4	684.6	527.0
75°	1756.7	1626.2	1571.2	1378.3	1198.5	982.6	739.6	589.4	477.8	406.3	322.6
77.5°	426.0	426.0	400.6	375.1	344.8	311.9	275.8	246.3	231.5	218.4	207.7
80°	206.9	205.2	198.7	197.8	192.1	184.7	180.6	174.8	172.4	169.1	167.5
82.5°	145.3	144.5	142.0	145.3	144.5	147.8	149.4	150.2	150.2	151.0	151.9
85°	91.9	95.2	101.8	110.0	117.4	126.4	134.6	141.2	146.1	150.2	153.5
87.5°	58.3	66.5	71.4	83.7	96.0	110.0	125.6	132.2	137.9	138.7	133.8
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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CATALOG NUMBER: VAL-E04-LED-E-U-GL2-7050

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1312.6	1311.8	1313.4	1311.8	1311.8	1311.0	1308.5	1306.0	1303.6	1302.7	1300.3
5°	1344.6	1344.6	1346.3	1343.0	1343.8	1340.5	1333.1	1324.9	1317.5	1311.0	1303.6
7.5°	1398.8	1396.3	1397.1	1396.3	1394.7	1388.1	1371.7	1351.2	1331.5	1311.0	1294.5
10°	1471.0	1466.1	1466.1	1464.5	1462.0	1453.0	1418.5	1377.4	1336.4	1299.5	1272.4
12.5°	1551.5	1552.3	1545.7	1541.6	1537.5	1518.6	1466.9	1401.2	1336.4	1277.3	1233.8
15°	1635.2	1634.4	1627.0	1624.5	1615.5	1587.6	1509.6	1413.6	1320.8	1233.8	1168.9
17.5°	1710.7	1707.4	1700.1	1695.1	1685.3	1648.3	1538.3	1407.8	1279.8	1165.7	1084.4
20°	1779.7	1775.6	1769.0	1760.0	1750.1	1696.8	1549.0	1378.3	1214.9	1084.4	1002.3
22.5°	1851.1	1842.1	1834.7	1822.4	1811.7	1740.3	1541.6	1325.7	1141.0	994.1	906.3
25°	1930.7	1920.0	1904.5	1889.7	1873.3	1775.6	1521.1	1260.1	1052.4	896.4	807.8
27.5°	2016.9	2001.3	1980.8	1961.9	1935.6	1801.8	1485.8	1187.0	955.5	799.5	707.6
30°	2108.0	2079.3	2053.9	2025.1	1991.5	1814.2	1434.9	1096.7	848.8	701.0	609.1
32.5°	2196.7	2158.1	2120.3	2078.5	2032.5	1809.2	1362.7	990.0	742.1	609.1	531.9
35°	2287.0	2231.2	2178.6	2122.0	2066.2	1784.6	1263.3	871.8	641.1	532.8	476.9
37.5°	2348.6	2278.8	2209.0	2140.9	2073.6	1731.2	1131.2	739.6	550.0	477.8	437.5
40°	2379.7	2294.4	2209.0	2124.4	2041.5	1642.6	976.9	618.9	485.1	436.7	408.0
42.5°	2370.7	2264.8	2158.9	2058.8	1957.0	1501.4	809.4	519.6	440.0	404.7	379.2
45°	2296.0	2169.6	2048.9	1943.0	1815.8	1320.0	664.9	458.1	405.5	378.4	354.6
47.5°	2155.6	2014.5	1866.7	1746.8	1627.8	1109.8	553.3	419.5	375.1	353.0	329.2
50°	1976.7	1813.3	1665.6	1535.9	1419.3	913.6	476.9	386.6	350.5	331.6	306.2
52.5°	1779.7	1604.0	1469.4	1333.1	1219.0	762.6	423.6	350.5	326.7	307.0	286.5
55°	1616.3	1453.8	1316.7	1179.6	1064.7	667.4	379.2	322.6	304.5	284.0	267.6
57.5°	1572.8	1387.3	1237.9	1108.2	990.0	609.1	347.2	297.2	284.8	269.3	251.2
60°	1590.9	1386.5	1219.0	1077.0	953.0	562.3	323.4	279.9	270.1	256.1	237.2
62.5°	1526.0	1310.1	1141.0	990.0	872.6	503.2	306.2	271.7	265.1	246.3	224.9
65°	1300.3	1102.4	939.9	809.4	708.4	423.6	292.2	279.1	272.5	239.7	216.7
67.5°	990.0	825.0	694.5	596.8	523.7	350.5	289.0	303.7	290.6	243.0	214.3
70°	684.6	559.8	476.1	417.0	371.0	295.5	299.6	330.8	311.9	253.7	228.2
72.5°	434.2	362.8	321.8	299.6	277.5	249.5	297.2	327.5	302.1	255.3	228.2
75°	278.3	248.7	234.8	226.6	220.0	217.5	261.9	269.3	243.0	221.6	212.6
77.5°	197.0	192.1	189.6	188.8	189.6	195.4	216.7	202.8	176.5	177.3	182.2
80°	166.6	166.6	165.0	165.8	167.5	169.9	173.2	149.4	135.4	146.1	162.5
82.5°	152.7	155.1	156.8	158.4	160.9	157.6	146.9	113.3	109.2	142.0	159.3
85°	155.1	155.1	156.0	157.6	158.4	142.0	122.3	85.4	83.7	159.3	150.2
87.5°	133.0	131.3	125.6	121.5	115.7	97.7	81.3	47.6	49.3	98.5	105.1
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-E04-LED-E-U-GL2-7050

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	1306.0	1306.0
2.5°	1299.5	1299.5
5°	1299.5	1299.5
7.5°	1288.8	1285.5
10°	1257.6	1253.5
12.5°	1210.0	1205.9
15°	1136.9	1132.0
17.5°	1045.8	1037.6
20°	950.6	939.1
22.5°	855.4	846.3
25°	757.7	749.5
27.5°	661.6	653.4
30°	573.0	569.7
32.5°	507.3	504.0
35°	458.9	457.2
37.5°	426.0	424.4
40°	397.3	395.7
42.5°	371.0	368.6
45°	344.8	345.6
47.5°	318.5	317.7
50°	295.5	295.5
52.5°	276.6	275.8
55°	259.4	258.6
57.5°	242.2	241.3
60°	227.4	224.9
62.5°	213.4	211.8
65°	204.4	203.6
67.5°	197.8	195.4
70°	196.2	189.6
72.5°	191.3	183.1
75°	179.8	175.7
77.5°	158.4	153.5
80°	122.3	113.3
82.5°	102.6	88.7
85°	75.5	69.8
87.5°	55.0	43.5
90°	0.0	0.0

(END OF REPORT)