

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: INVUE

Report Number: P140760

Luminaire Tested: **ECM-E03-LED-E1-RW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140760  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33689)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-E03-LED-E1-RW  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (63) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8872 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

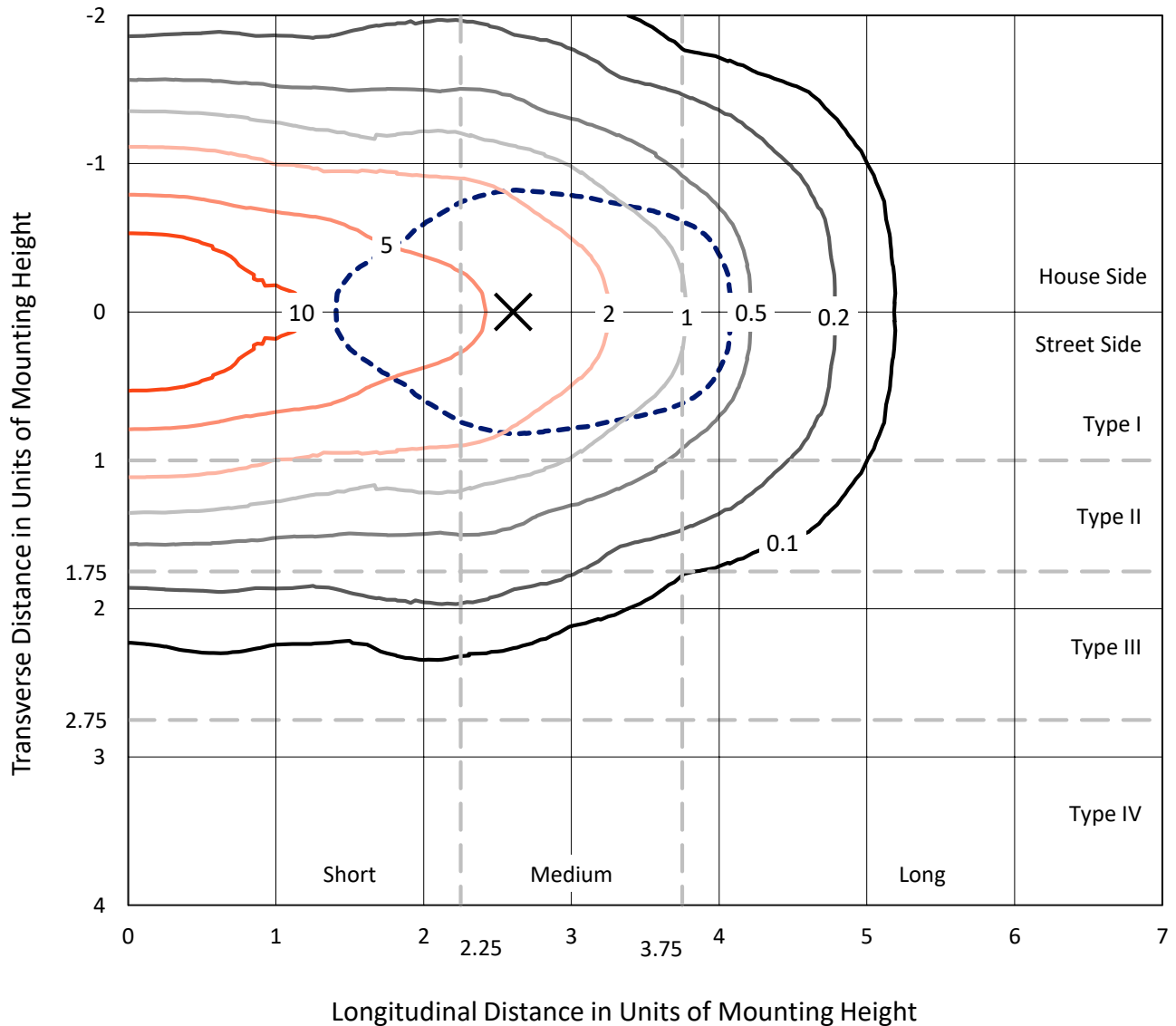
Input Watts (W): 75.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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 CATALOG NUMBER: ECM-E03-LED-E1-RW

### Iso-Footcandle Lines of Horizontal Illumination

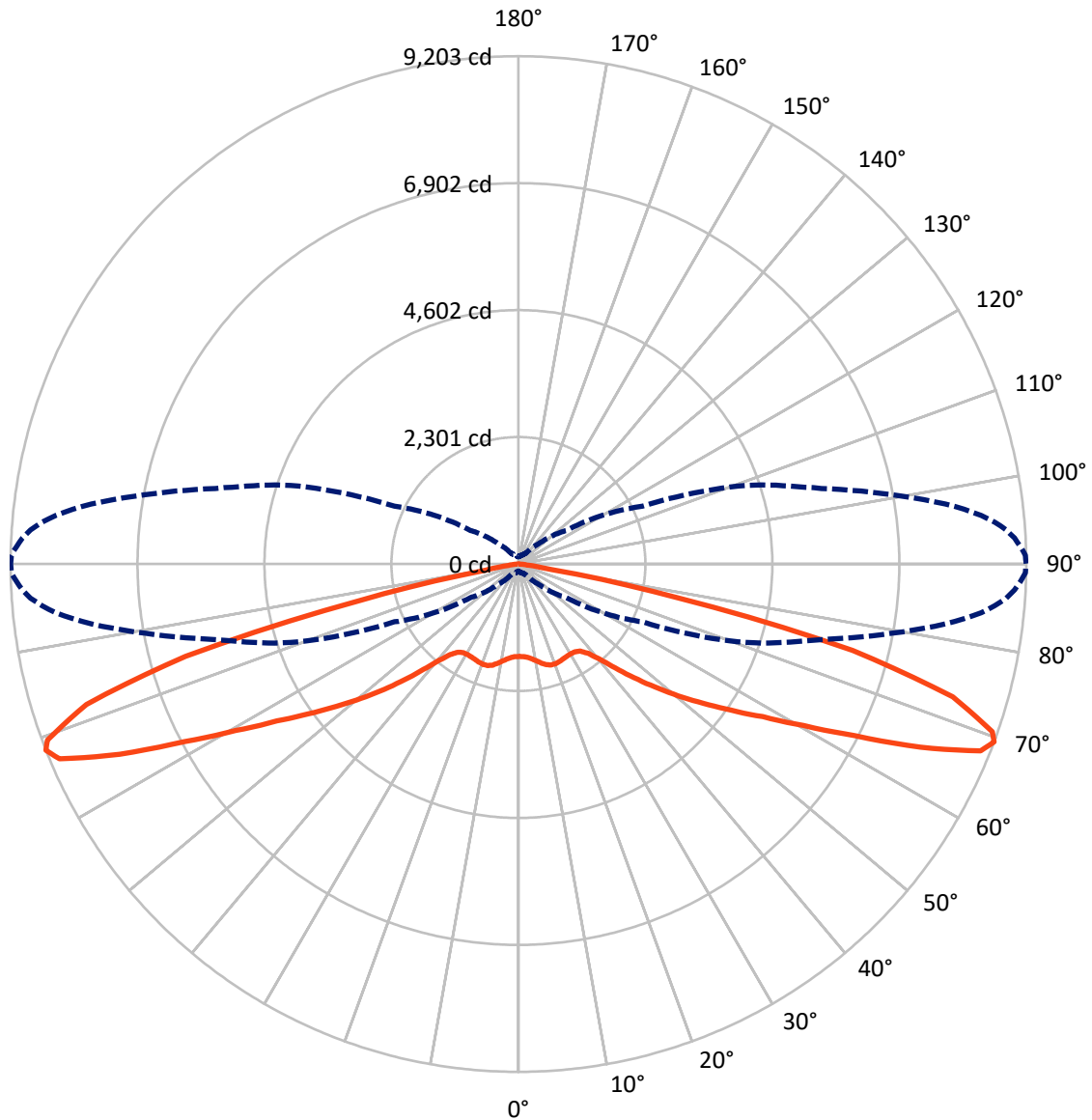
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.1 fc  
 Type I - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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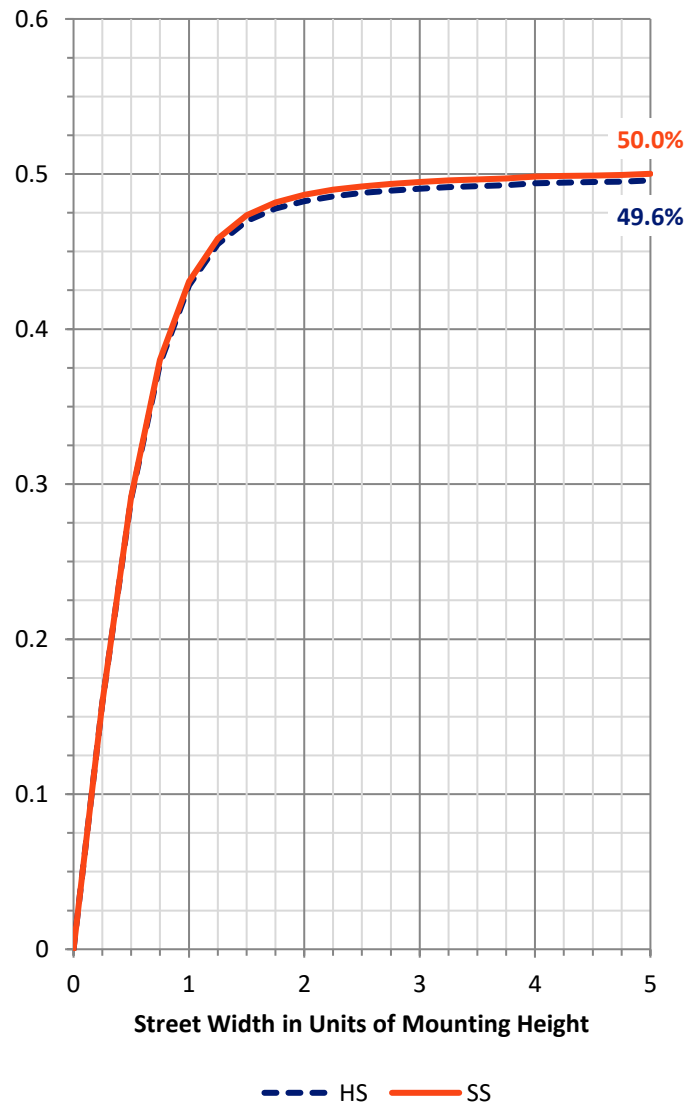
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4436.0	0.0	4436.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	4436.0	0.0	4436.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	8872.0	0.0	8872.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.0	1.8
10°-20°	515.6	5.8
20°-30°	833.8	9.4
30°-40°	1041.4	11.7
40°-50°	1302.6	14.7
50°-60°	1605.1	18.1
60°-70°	1987.2	22.4
70°-80°	1298.8	14.6
80°-90°	123.4	1.4
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°	8872.0	100.0
0°-180°	8872.0	100.0



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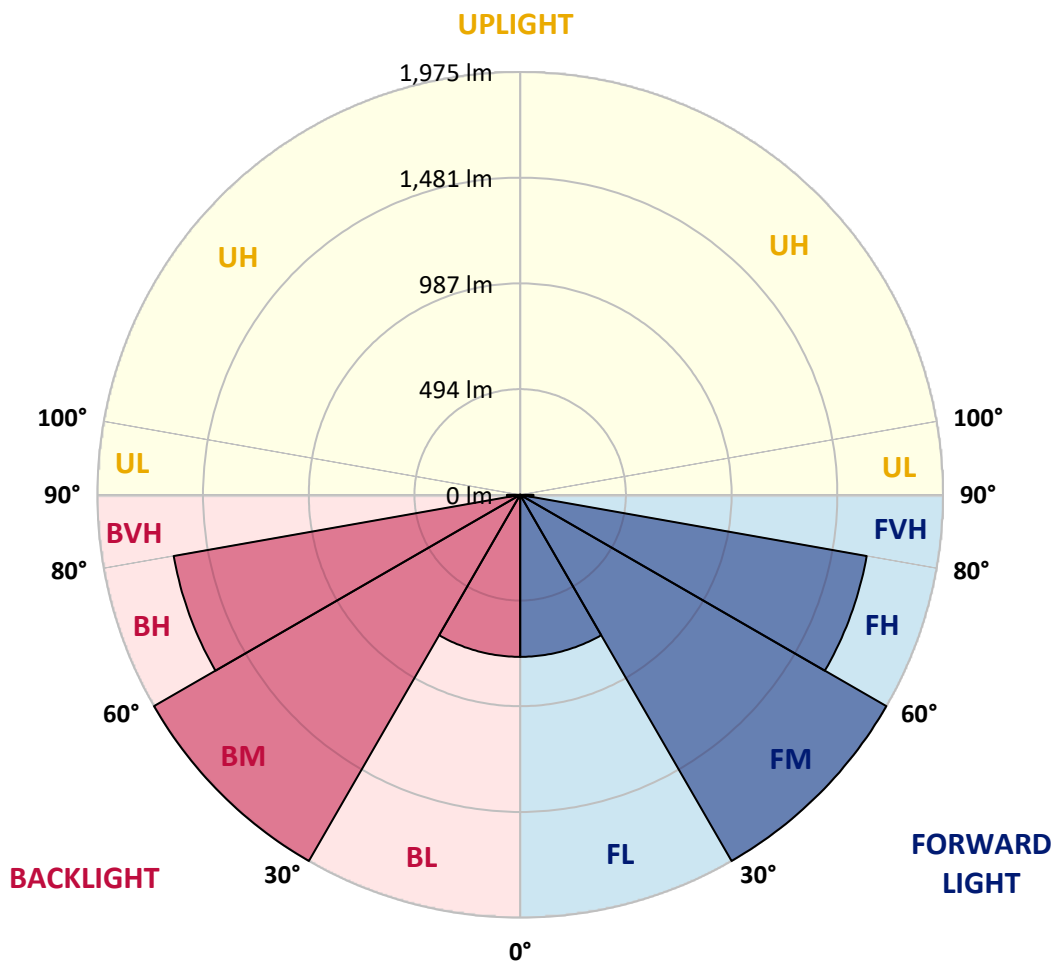
CATALOG NUMBER: ECM-E03-LED-E1-RW

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	756.7	8.5			
FM	(30°-60°)	1974.6	22.3			
FH	(60°-80°)	1643.0	18.5			G1/1800
FVH	(80°-90°)	61.7	0.7			G1/100
BL	(0°-30°)	756.7	8.5	B2/1000		
BM	(30°-60°)	1974.6	22.3	B2/2500		
BH	(60°-80°)	1643.0	18.5	B3/2500		G3/2500
BVH	(80°-90°)	61.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0
2.5°	1686.0	1687.0	1684.0	1685.0	1686.0	1685.0	1683.5	1683.5	1683.0	1682.5	1682.0
5°	1697.0	1697.5	1696.0	1698.5	1699.0	1700.5	1700.5	1701.0	1700.7	1700.4	1700.1
7.5°	1712.5	1714.5	1713.0	1716.5	1720.0	1725.0	1727.5	1733.5	1733.4	1733.3	1733.2
10°	1727.0	1729.0	1729.0	1737.0	1745.5	1755.0	1765.0	1774.5	1775.1	1775.7	1776.3
12.5°	1738.0	1739.5	1742.0	1756.5	1775.5	1791.5	1809.0	1824.0	1824.6	1825.2	1825.8
15°	1733.5	1737.0	1748.5	1771.5	1805.0	1831.5	1853.0	1871.0	1872.2	1873.4	1874.6
17.5°	1718.0	1723.5	1740.0	1779.0	1830.5	1873.0	1898.5	1903.5	1904.3	1905.1	1905.9
20°	1684.5	1692.5	1718.5	1774.0	1850.0	1907.5	1933.0	1924.0	1923.2	1922.4	1921.6
22.5°	1628.5	1639.0	1671.5	1750.5	1851.5	1932.5	1957.5	1932.5	1929.7	1926.9	1924.1
25°	1553.5	1562.0	1599.0	1692.5	1828.5	1937.0	1973.0	1938.0	1933.5	1929.0	1924.5
27.5°	1462.5	1469.5	1515.5	1615.0	1771.5	1914.0	1983.0	1947.5	1941.7	1935.9	1930.1
30°	1360.0	1366.0	1416.5	1522.5	1691.5	1863.5	1982.0	1969.0	1962.1	1955.2	1948.3
32.5°	1258.0	1260.5	1305.5	1422.0	1602.5	1789.0	1965.5	2002.0	1995.3	1988.6	1981.9
35°	1146.0	1154.0	1202.0	1329.0	1502.0	1707.0	1943.5	2048.0	2044.2	2040.4	2036.6
37.5°	1056.0	1058.5	1110.0	1242.0	1420.5	1632.5	1915.5	2107.0	2109.7	2112.4	2115.1
40°	966.0	966.0	1017.0	1154.0	1339.0	1565.5	1892.0	2179.5	2193.2	2206.9	2220.6
42.5°	867.5	874.5	924.5	1061.0	1260.0	1508.5	1880.0	2266.5	2292.3	2318.1	2343.9
45°	775.5	780.0	831.0	964.5	1161.5	1443.5	1876.5	2363.5	2402.7	2441.9	2481.1
47.5°	685.0	691.5	740.0	862.5	1054.0	1357.0	1872.0	2474.0	2524.1	2574.2	2624.3
50°	601.0	605.0	659.0	770.5	948.0	1245.0	1842.5	2597.5	2658.7	2719.9	2781.1
52.5°	512.0	520.0	564.5	679.5	841.0	1124.5	1765.0	2732.0	2806.0	2880.0	2954.0
55°	419.0	417.0	470.5	578.5	747.5	1009.0	1622.0	2848.5	2937.8	3027.1	3116.4
57.5°	307.0	313.5	362.5	472.0	639.0	912.0	1453.5	2909.0	3020.4	3131.8	3243.2
60°	220.0	229.0	271.5	358.0	531.0	817.0	1281.5	2867.0	3014.6	3162.2	3309.8
62.5°	172.0	176.0	212.5	268.5	414.0	717.5	1166.0	2758.0	2961.5	3165.0	3368.5
65°	150.0	154.5	187.0	216.0	314.5	623.0	1096.5	2671.0	2939.6	3208.2	3476.8
67.5°	136.5	142.0	170.0	190.0	258.0	542.5	1080.0	2600.0	2915.1	3230.2	3545.3
69°	130.0	135.5	161.5	180.0	239.5	517.0	1061.0	2480.5	2800.3	3120.1	3439.9
70°	127.0	131.5	156.5	174.0	233.5	502.0	1018.0	2344.0	2653.1	2962.2	3271.3
72.5°	117.0	119.5	142.5	159.5	221.0	420.0	806.5	1754.5	2012.8	2271.1	2529.4
75°	103.5	107.5	128.5	146.0	177.5	269.0	529.0	1060.5	1251.8	1443.1	1634.4
77.5°	89.0	92.5	110.5	139.5	136.5	163.0	304.0	592.5	695.9	799.3	902.7
80°	77.0	80.5	97.0	129.5	111.0	120.5	205.0	386.5	425.8	465.1	504.4
82.5°	60.5	63.0	81.5	105.5	86.0	89.5	153.5	337.5	361.2	384.9	408.6
85°	38.5	40.0	59.5	72.0	60.0	53.0	96.5	247.5	266.2	284.9	303.6
87.5°	13.5	19.0	26.5	25.0	25.0	19.0	34.0	91.5	98.8	106.1	113.4
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: ECM-E03-LED-E1-RW

**CANDELA DISTRIBUTION (continued):**

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0
2.5°	1681.5	1681.0	1681.5	1681.5	1681.0	1680.5	1680.5	1680.0	1679.0	1679.0	1678.5
5°	1699.8	1699.5	1700.5	1700.0	1700.5	1700.0	1700.0	1699.5	1700.0	1698.0	1697.5
7.5°	1733.1	1733.0	1733.0	1734.5	1733.5	1733.0	1734.0	1734.0	1734.0	1733.0	1733.0
10°	1776.9	1777.5	1778.5	1779.5	1779.5	1779.5	1781.5	1780.0	1783.0	1780.0	1781.5
12.5°	1826.4	1827.0	1829.5	1830.5	1831.5	1831.5	1831.5	1834.5	1836.5	1836.0	1836.5
15°	1875.8	1877.0	1877.5	1879.0	1879.0	1879.5	1881.5	1885.0	1884.0	1886.0	1886.0
17.5°	1906.7	1907.5	1907.0	1907.0	1908.0	1909.5	1911.5	1913.5	1913.0	1914.5	1915.5
20°	1920.8	1920.0	1918.5	1917.5	1917.0	1918.0	1918.0	1918.5	1919.5	1919.5	1919.5
22.5°	1921.3	1918.5	1915.0	1913.0	1910.5	1909.0	1910.0	1909.0	1909.0	1909.0	1908.0
25°	1920.0	1915.5	1910.0	1906.0	1902.0	1899.5	1897.0	1896.0	1894.0	1894.0	1894.0
27.5°	1924.3	1918.5	1913.0	1905.5	1900.0	1897.0	1893.5	1890.0	1888.0	1886.0	1886.0
30°	1941.4	1934.5	1927.5	1918.5	1911.0	1908.5	1902.0	1898.5	1893.5	1891.0	1890.0
32.5°	1975.2	1968.5	1959.0	1949.0	1943.0	1935.5	1930.0	1922.5	1917.0	1913.5	1909.0
35°	2032.8	2029.0	2021.0	2014.5	2005.5	1997.0	1986.0	1982.0	1970.5	1968.5	1963.0
37.5°	2117.8	2120.5	2119.0	2114.0	2108.0	2100.5	2096.0	2087.5	2083.0	2078.5	2073.5
40°	2234.3	2248.0	2252.5	2258.0	2259.5	2266.0	2258.5	2257.5	2251.5	2256.5	2253.5
42.5°	2369.7	2395.5	2409.5	2426.0	2444.0	2460.5	2473.5	2495.5	2493.0	2510.0	2522.0
45°	2520.3	2559.5	2595.5	2623.0	2657.5	2695.5	2729.0	2760.0	2795.0	2815.0	2844.5
47.5°	2674.4	2724.5	2776.0	2827.0	2876.0	2925.0	2985.0	3039.5	3092.5	3128.5	3174.0
50°	2842.3	2903.5	2965.5	3028.0	3097.5	3174.5	3241.5	3312.5	3385.5	3459.5	3511.5
52.5°	3028.0	3102.0	3169.5	3235.5	3321.5	3403.0	3490.0	3579.0	3689.5	3770.0	3841.5
55°	3205.7	3295.0	3369.0	3448.0	3538.0	3628.5	3735.0	3846.5	3963.5	4079.5	4184.5
57.5°	3354.6	3466.0	3554.0	3632.5	3729.0	3833.5	3948.0	4086.0	4219.5	4363.5	4499.0
60°	3457.4	3605.0	3711.0	3805.5	3917.5	4033.5	4183.0	4346.0	4521.5	4700.5	4874.5
62.5°	3572.0	3775.5	3920.5	4055.5	4188.0	4317.0	4485.5	4688.0	4926.0	5142.5	5373.0
65°	3745.4	4014.0	4228.0	4400.0	4588.0	4776.0	4972.5	5209.0	5479.5	5795.5	6064.0
67.5°	3860.4	4175.5	4447.5	4694.0	4913.5	5142.0	5390.0	5673.0	5999.5	6322.0	6656.0
69°	3759.7	4079.5	4367.0	4638.5	4879.0	5125.0	5377.0	5662.0	5995.5	6352.0	6704.5
70°	3580.4	3889.5	4186.5	4472.5	4707.5	4964.5	5212.5	5484.0	5822.0	6178.5	6562.0
72.5°	2787.7	3046.0	3351.0	3627.0	3907.5	4142.0	4366.0	4638.5	4979.5	5319.0	5692.5
75°	1825.7	2017.0	2296.0	2523.0	2765.5	2985.5	3148.0	3418.5	3625.5	3945.0	4292.0
77.5°	1006.1	1109.5	1254.5	1439.5	1544.0	1668.0	1830.5	1929.0	2076.0	2299.5	2403.5
80°	543.7	583.0	644.0	682.5	713.5	683.0	666.5	696.0	683.5	680.0	646.5
82.5°	432.3	456.0	487.5	510.0	495.5	430.0	360.5	310.0	277.5	233.5	200.0
85°	322.3	341.0	353.0	368.0	365.5	330.5	264.5	204.5	160.5	128.0	111.5
87.5°	120.7	128.0	131.5	160.0	147.0	139.5	108.5	79.0	60.5	44.0	35.5
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: ECM-E03-LED-E1-RW

**CANDELA DISTRIBUTION (continued):**

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0	1675.0
2.5°	1679.5	1679.0	1679.0	1679.0	1679.5	1678.5	1677.5	1678.5	1678.0	1678.0	1678.0
5°	1699.5	1699.0	1699.0	1699.5	1699.0	1699.5	1699.0	1697.0	1698.0	1698.5	1699.0
7.5°	1734.0	1733.5	1733.5	1736.0	1735.5	1735.0	1734.5	1735.5	1734.0	1734.0	1735.0
10°	1781.5	1783.5	1783.0	1784.5	1784.0	1783.0	1782.0	1783.0	1784.5	1785.0	1783.0
12.5°	1839.5	1840.0	1839.0	1841.5	1840.0	1843.5	1839.5	1841.5	1843.5	1840.5	1842.0
15°	1886.5	1886.5	1888.5	1889.0	1888.5	1889.5	1892.5	1891.0	1889.5	1892.0	1893.0
17.5°	1915.0	1916.5	1917.0	1917.5	1918.5	1919.5	1920.0	1919.5	1920.0	1921.0	1923.0
20°	1921.5	1921.0	1922.0	1922.5	1924.0	1924.0	1925.0	1924.5	1926.0	1926.5	1927.0
22.5°	1910.0	1910.5	1911.0	1912.5	1912.0	1913.0	1913.5	1915.0	1914.5	1915.5	1916.0
25°	1894.5	1895.5	1896.0	1895.5	1895.5	1896.0	1896.5	1896.0	1898.0	1899.0	1899.0
27.5°	1884.5	1884.5	1886.0	1885.5	1884.5	1885.5	1885.0	1885.0	1885.0	1885.5	1887.0
30°	1888.5	1887.0	1886.0	1886.0	1885.5	1884.5	1883.5	1882.0	1882.0	1882.5	1882.0
32.5°	1910.0	1907.0	1905.5	1904.0	1903.0	1900.5	1897.5	1896.5	1894.0	1894.0	1893.0
35°	1965.0	1961.5	1961.5	1956.0	1953.0	1951.5	1949.0	1941.5	1942.0	1939.0	1938.0
37.5°	2074.5	2068.5	2066.0	2071.0	2061.5	2065.5	2057.0	2053.5	2055.5	2050.0	2053.0
40°	2258.5	2268.0	2264.0	2269.5	2272.0	2273.0	2273.0	2264.5	2273.0	2259.5	2264.0
42.5°	2524.0	2549.0	2558.0	2561.0	2576.5	2572.5	2568.0	2567.5	2567.0	2573.5	2570.0
45°	2858.0	2861.5	2904.0	2912.0	2920.5	2930.0	2927.5	2938.5	2946.5	2935.5	2937.0
47.5°	3199.5	3235.0	3266.0	3283.0	3301.5	3292.0	3299.5	3304.0	3332.5	3329.5	3327.0
50°	3575.5	3635.0	3651.5	3670.0	3684.5	3713.5	3711.0	3728.5	3725.5	3749.0	3752.0
52.5°	3932.0	3997.5	4064.0	4093.0	4115.0	4148.5	4161.5	4180.5	4173.5	4171.5	4189.0
55°	4286.5	4396.0	4472.0	4546.5	4588.0	4632.5	4651.5	4678.5	4690.5	4696.0	4674.0
57.5°	4638.0	4769.5	4898.0	4990.0	5054.0	5121.0	5156.5	5186.0	5220.5	5232.0	5221.0
60°	5049.0	5241.5	5410.0	5533.0	5651.0	5724.0	5800.5	5856.5	5867.0	5914.5	5945.0
62.5°	5596.5	5831.0	6044.5	6223.5	6406.5	6543.0	6681.0	6736.0	6790.5	6827.5	6850.0
65°	6343.0	6652.0	6947.0	7201.5	7426.0	7653.0	7814.0	7898.5	8007.0	8028.5	8005.0
67.5°	6997.5	7362.0	7728.5	8052.5	8295.0	8530.5	8721.5	8861.5	8963.0	9013.0	9034.0
69°	7069.5	7440.0	7814.5	8137.5	8431.0	8666.0	8861.5	9000.5	9101.5	9188.0	9203.0
70°	6922.0	7338.0	7702.0	8028.0	8330.5	8570.0	8745.0	8904.0	9019.0	9085.5	9109.0
72.5°	6076.5	6450.5	6818.0	7193.5	7453.0	7740.5	7884.5	8012.0	8165.0	8252.0	8233.0
75°	4605.0	4928.5	5249.0	5530.0	5730.0	5836.0	6004.5	6128.0	6105.5	6252.0	6256.0
77.5°	2597.5	2639.5	2857.0	2828.0	2924.0	2926.5	2951.5	2995.0	2911.5	3083.0	2960.0
80°	630.0	621.5	666.5	613.5	609.0	604.5	589.5	619.0	623.0	592.5	598.0
82.5°	185.0	177.0	173.5	169.0	176.5	174.0	175.5	176.5	181.5	175.0	182.0
85°	101.5	95.5	95.0	92.5	92.0	86.5	86.0	86.0	82.5	83.5	83.0
87.5°	39.0	36.5	34.5	33.0	32.5	31.0	29.5	27.0	24.0	21.5	20.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)