

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: P676217

Luminaire Tested: **CCW-SA-2E-850-U-T1**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676217
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-2E-850-U-T1
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/
T1 distribution lens
Light Source: (32) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

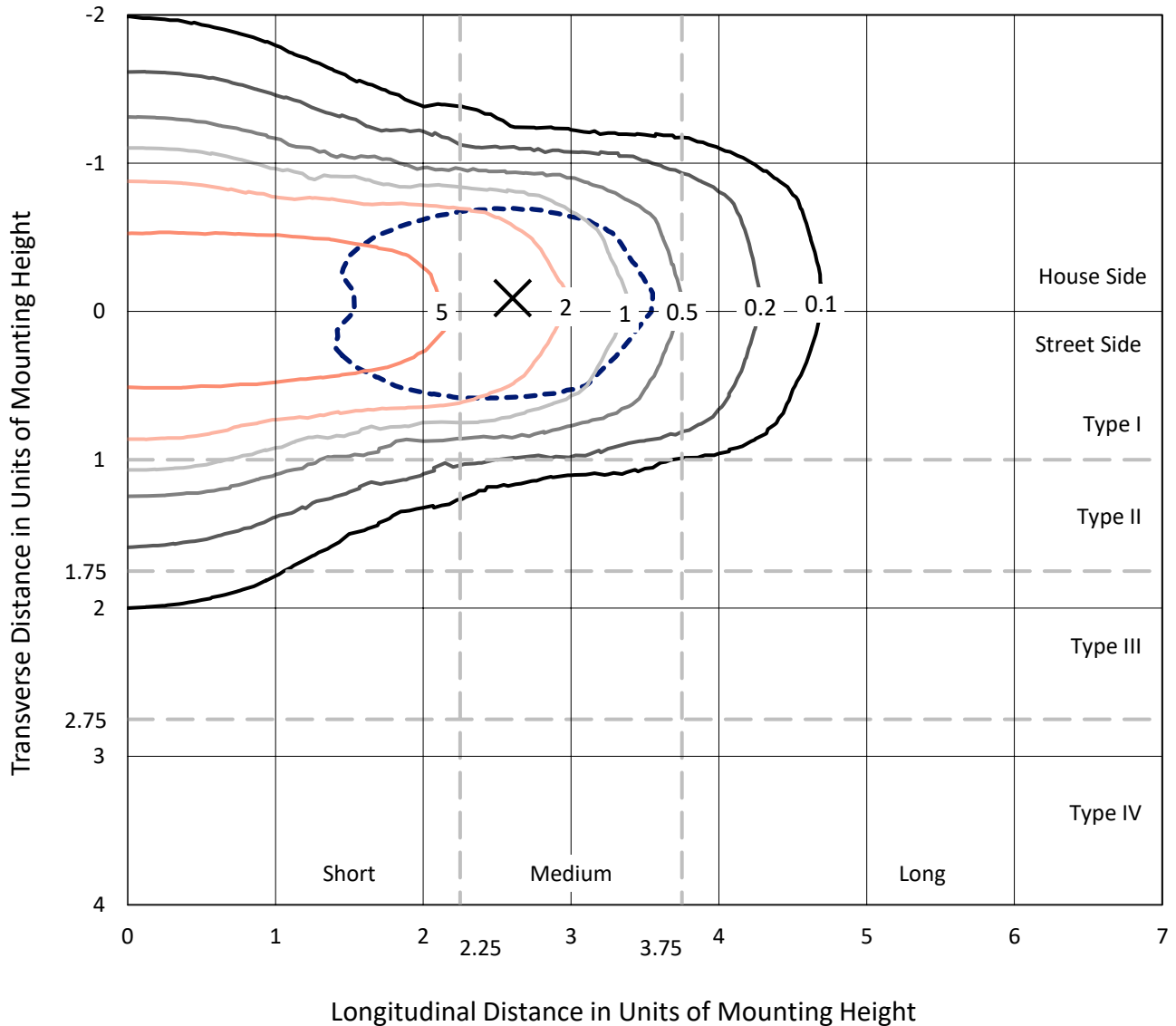
Lumens per Lamp: N/A
Luminaire Lumens: 11618.3 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 106.6
Input Voltage (V): 120
Input Current (A_{in}): 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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Iso-Footcandle Lines of Horizontal Illumination

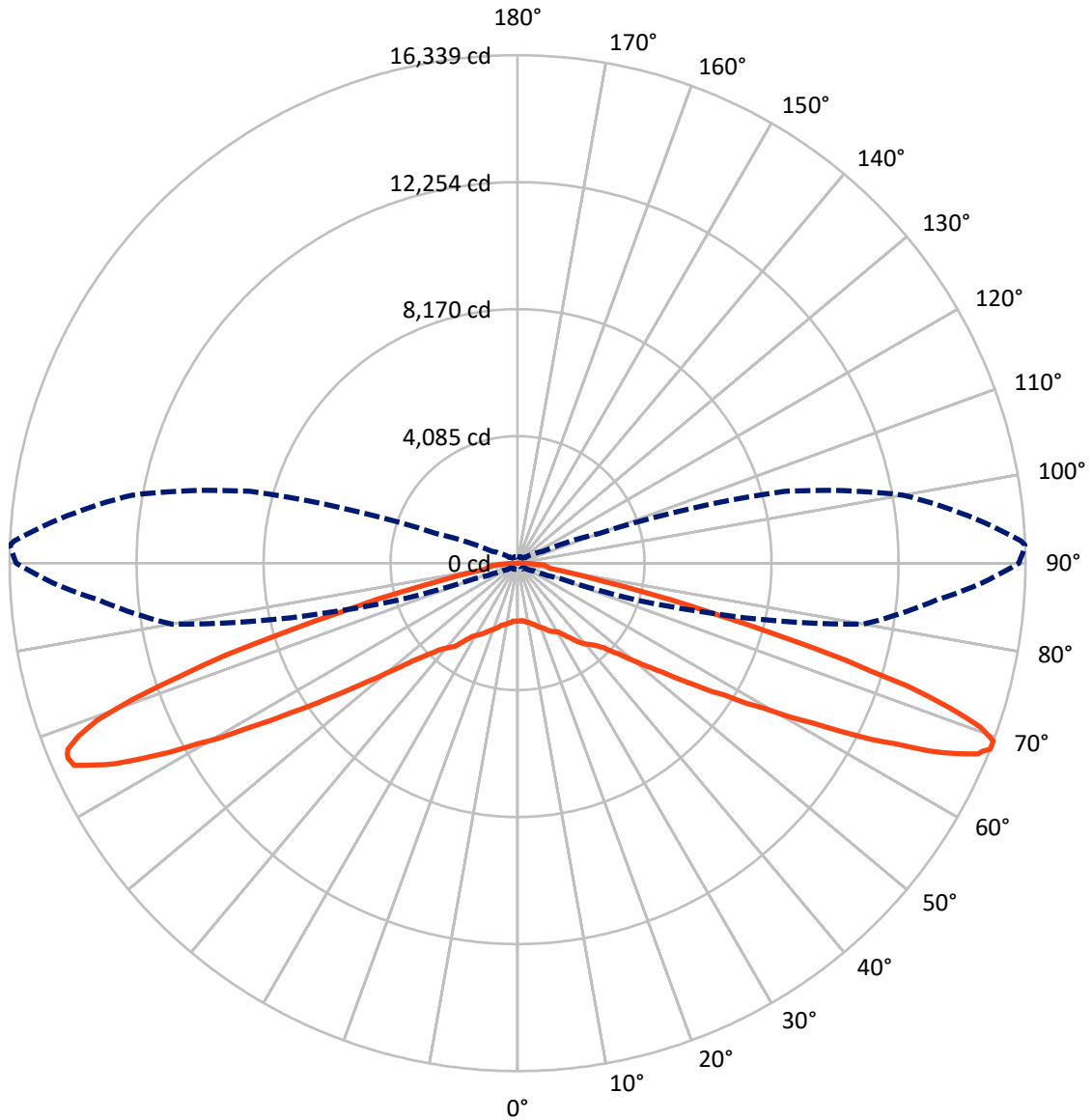
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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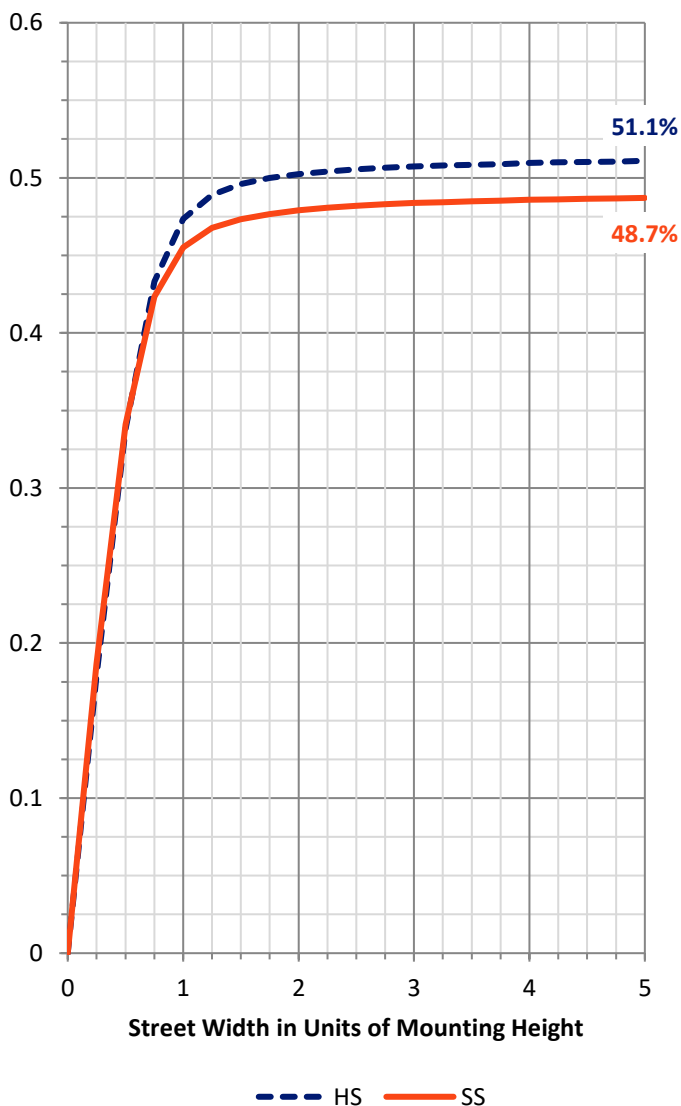
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5983.2	0.0	5983.2
	% Fixture	51.5	0.0	51.5
Street Side	Lumens	5635.0	0.0	5635.0
	% Fixture	48.5	0.0	48.5
Total	Lumens	11618.3	0.0	11618.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	1.6
10°-20°	602.7	5.2
20°-30°	1028.6	8.9
30°-40°	1436.2	12.4
40°-50°	1826.8	15.7
50°-60°	2309.9	19.9
60°-70°	2848.7	24.5
70°-80°	1244.4	10.7
80°-90°	135.0	1.2
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°	11618.3	100.0
0°-180°	11618.3	100.0



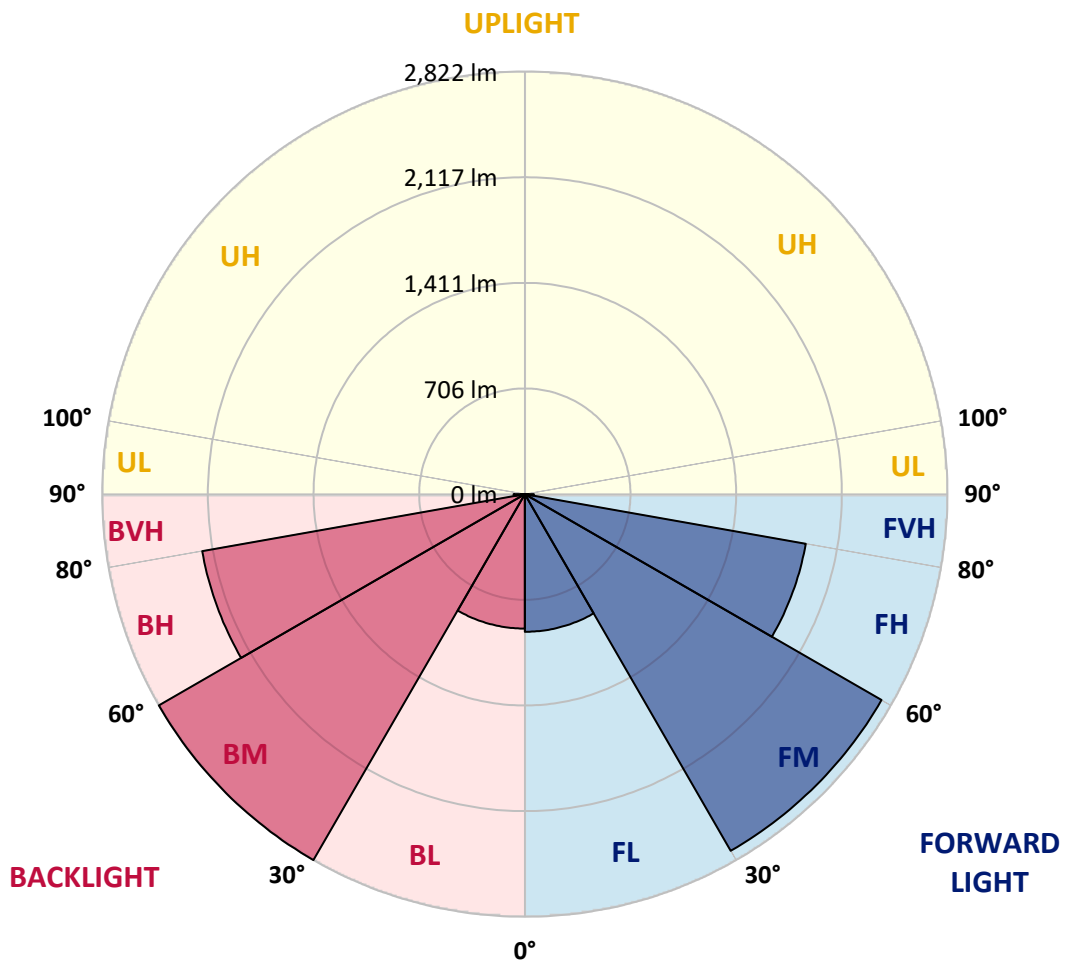
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	919.5	7.9			
FM (30°-60°)	2750.5	23.7			
FH (60°-80°)	1905.2	16.4			G2/5000
FVH (80°-90°)	59.8	0.5			G1/100
BL (0°-30°)	897.9	7.7	B2/1000		
BM (30°-60°)	2822.3	24.3	B3/5000		
BH (60°-80°)	2187.9	18.8	B3/2500		G3/2500
BVH (80°-90°)	75.1	0.6			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°	70°	75°	80°
0°	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9
2.5°	1897.1	1894.9	1901.5	1905.8	1886.2	1892.7	1888.4	1884.0	1868.8	1862.2	1849.1
5°	1949.4	1956.0	1977.8	1958.2	1966.9	1956.0	1921.1	1932.0	1912.4	1908.0	1894.9
7.5°	2041.0	2027.9	2058.5	2036.7	2043.2	2021.4	2006.1	1986.5	1982.1	1951.6	1953.8
10°	2060.6	2086.8	2099.9	2095.5	2099.9	2110.8	2082.5	2051.9	2010.5	2001.8	1971.2
12.5°	2047.6	2071.6	2106.4	2134.8	2154.4	2158.8	2147.9	2141.3	2123.9	2073.7	2071.6
15°	2034.5	2017.0	2038.8	2137.0	2202.4	2246.0	2261.3	2224.2	2228.6	2163.1	2137.0
17.5°	1947.3	1921.1	2006.1	2102.1	2182.8	2278.7	2352.8	2341.9	2341.9	2289.6	2252.5
20°	1831.7	1875.3	1918.9	2041.0	2189.3	2333.2	2475.0	2468.4	2442.3	2427.0	2346.3
22.5°	1733.6	1753.2	1833.9	1962.5	2147.9	2348.5	2516.4	2636.3	2575.3	2514.2	2466.2
25°	1666.0	1648.5	1751.0	1884.0	2108.6	2322.3	2594.9	2719.2	2751.9	2706.1	2614.5
27.5°	1570.0	1570.0	1650.7	1777.2	1982.1	2309.2	2671.2	2860.9	2908.9	2841.3	2708.3
30°	1461.0	1474.1	1543.9	1687.8	1888.4	2213.3	2701.7	3024.5	3063.7	3004.8	2867.5
32.5°	1375.9	1375.9	1454.4	1607.1	1823.0	2169.7	2682.1	3185.8	3260.0	3216.4	3074.6
35°	1284.4	1277.8	1334.5	1502.4	1718.3	2084.6	2675.6	3314.5	3480.2	3482.4	3334.1
37.5°	1153.5	1179.7	1251.7	1384.7	1635.4	2001.8	2655.9	3469.3	3765.9	3816.0	3713.5
40°	1066.3	1077.2	1142.6	1288.7	1506.8	1903.6	2627.6	3595.8	3955.6	4127.8	3986.1
42.5°	939.8	955.1	1005.2	1186.2	1382.5	1764.1	2503.3	3685.2	4226.0	4422.2	4302.3
45°	806.8	815.5	889.7	1038.0	1249.5	1598.4	2370.3	3829.1	4487.6	4888.9	4819.1
47.5°	647.6	652.0	715.2	870.1	1090.3	1432.6	2165.3	3822.6	4699.2	5355.5	5551.8
50°	505.9	516.8	564.8	691.2	898.4	1229.8	1927.6	3770.2	4965.2	5887.6	6273.5
52.5°	403.4	405.6	436.1	536.4	693.4	1027.1	1672.5	3604.5	5216.0	6408.7	7158.8
55°	333.6	333.6	351.1	412.1	532.1	780.6	1373.8	3329.7	5246.5	6984.4	8124.8
56°	320.5	316.2	331.4	383.8	479.7	704.3	1234.2	3144.4	5290.1	7250.4	8608.9
57°	303.1	305.3	314.0	351.1	431.8	623.6	1079.4	2963.4	5259.6	7468.5	8966.6
58°	294.4	290.0	307.5	331.4	381.6	553.9	972.5	2749.7	5211.6	7647.3	9487.7
59°	281.3	279.1	290.0	311.8	355.4	492.8	841.7	2518.6	5117.8	7878.4	9875.9
60°	276.9	274.8	279.1	296.6	327.1	431.8	741.4	2248.2	4867.1	8116.1	10357.8
61°	263.9	266.0	274.8	285.7	309.6	388.1	667.3	1971.2	4703.5	8316.7	10889.8
62°	266.0	261.7	266.0	274.8	292.2	357.6	584.4	1698.7	4411.3	8543.5	11288.9
63°	252.9	250.8	257.3	268.2	276.9	322.7	510.3	1467.5	4079.9	8595.9	11626.9
64°	248.6	246.4	248.6	263.9	266.0	303.1	451.4	1253.8	3600.1	8685.3	12060.8
65°	237.7	237.7	242.0	248.6	257.3	285.7	403.4	1088.1	3122.6	8449.8	12193.8
66°	229.0	231.1	231.1	242.0	248.6	266.0	370.7	924.6	2664.7	8074.7	12322.5
67°	222.4	222.4	224.6	233.3	239.9	250.8	333.6	800.3	2248.2	7627.7	12124.0
67.5°	218.1	220.2	220.2	229.0	235.5	250.8	318.4	758.8	2010.5	7137.0	11975.8
68°	211.5	213.7	213.7	222.4	229.0	242.0	307.5	693.4	1853.5	6818.7	11701.0
69°	207.2	205.0	205.0	213.7	222.4	231.1	285.7	606.2	1474.1	5929.0	11299.8
70°	194.1	194.1	198.4	205.0	211.5	220.2	263.9	534.2	1247.3	4908.5	10266.2
71°	187.5	185.3	187.5	194.1	200.6	211.5	242.0	473.2	1020.5	4075.5	9250.0
72°	174.4	178.8	178.8	185.3	191.9	198.4	226.8	412.1	857.0	3257.8	8131.4
72.5°	172.3	172.3	174.4	181.0	185.3	196.3	218.1	394.7	782.8	2871.8	7662.6
73°	165.7	165.7	167.9	174.4	178.8	189.7	211.5	355.4	713.1	2555.6	6786.0
74°	159.2	157.0	157.0	165.7	167.9	178.8	198.4	314.0	597.5	1925.5	5447.1
75°	148.3	148.3	150.5	154.8	157.0	165.7	183.2	279.1	503.7	1493.7	4260.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
77.5°	122.1	124.3	126.5	130.8	130.8	137.4	150.5	194.1	307.5	756.7	1956.0
80°	89.4	93.8	100.3	106.8	104.7	104.7	117.8	139.6	183.2	340.2	750.1
82.5°	72.0	76.3	69.8	78.5	78.5	74.1	85.0	102.5	124.3	167.9	268.2
85°	48.0	50.2	41.4	48.0	45.8	45.8	56.7	61.1	76.3	93.8	133.0
87.5°	21.8	21.8	17.4	19.6	19.6	19.6	28.3	21.8	32.7	45.8	78.5
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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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
0°	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9
2.5°	1862.2	1870.9	1870.9	1862.2	1855.7	1862.2	1857.9	1847.0	1857.9	1862.2	1864.4
5°	1888.4	1870.9	1879.7	1860.0	1873.1	1870.9	1866.6	1877.5	1879.7	1879.7	1894.9
7.5°	1916.7	1938.5	1910.2	1912.4	1918.9	1892.7	1901.5	1905.8	1897.1	1914.6	1927.6
10°	1966.9	1975.6	1966.9	1934.2	1956.0	1938.5	1932.0	1951.6	1947.3	1951.6	1971.2
12.5°	2012.7	2027.9	2004.0	2001.8	1990.9	1975.6	1984.3	1982.1	2012.7	2017.0	2041.0
15°	2106.4	2067.2	2058.5	2056.3	2051.9	2045.4	2049.7	2051.9	2091.2	2097.7	2154.4
17.5°	2187.1	2180.6	2132.6	2150.1	2150.1	2123.9	2113.0	2150.1	2180.6	2213.3	2252.5
20°	2270.0	2263.4	2211.1	2213.3	2193.7	2217.7	2204.6	2239.5	2291.8	2302.7	2337.6
22.5°	2368.1	2339.8	2302.7	2307.1	2313.6	2296.2	2287.4	2335.4	2387.7	2418.3	2420.4
25°	2522.9	2451.0	2420.4	2424.8	2416.1	2403.0	2409.5	2470.6	2496.8	2562.2	2549.1
27.5°	2605.8	2564.4	2542.6	2492.4	2494.6	2475.0	2501.1	2592.7	2645.0	2695.2	2594.9
30°	2706.1	2679.9	2584.0	2566.5	2564.4	2555.6	2603.6	2721.4	2799.9	2828.2	2684.3
32.5°	2902.4	2797.7	2773.7	2758.4	2723.5	2734.4	2758.4	2913.3	3037.6	3031.0	2767.2
35°	3127.0	3055.0	2987.4	2974.3	2970.0	2939.4	2980.9	3161.8	3257.8	3229.4	2797.7
37.5°	3486.7	3377.7	3286.1	3236.0	3227.3	3205.5	3303.6	3447.5	3571.8	3460.6	2821.7
40°	3663.4	3541.3	3456.2	3425.7	3432.2	3462.8	3558.7	3778.9	3833.5	3628.5	2841.3
42.5°	3916.3	3783.3	3615.4	3600.1	3580.5	3595.8	3781.1	4077.7	4123.5	3855.3	2767.2
45°	4365.5	4164.9	3970.8	3883.6	3888.0	3929.4	4217.2	4542.2	4457.1	4012.3	2649.4
47.5°	4932.5	4638.1	4481.1	4363.3	4420.0	4374.2	4832.2	5091.7	4801.6	4210.7	2505.5
50°	5785.1	5373.0	5159.3	5017.5	5041.5	5080.8	5545.2	5765.5	5183.2	4306.6	2285.2
52.5°	6860.1	6330.2	6016.2	5826.5	5844.0	5929.0	6528.7	6461.1	5619.4	4387.3	1990.9
55°	8146.7	7601.5	6993.1	6914.6	6895.0	7097.8	7758.5	7189.4	6011.9	4258.7	1685.6
56°	8827.0	8247.0	7614.6	7453.2	7405.3	7547.0	8323.3	7553.5	6147.1	4114.8	1539.5
57°	9404.8	8851.0	8157.6	7882.8	7943.9	8209.9	8883.7	7895.9	6271.4	3966.5	1402.1
58°	10198.6	9566.2	8833.5	8624.2	8569.7	8781.2	9487.7	8240.4	6312.8	3813.8	1275.6
59°	10990.1	10231.3	9570.6	9189.0	9204.2	9590.2	10083.0	8650.4	6376.0	3619.8	1114.3
60°	11592.0	11210.4	10327.2	10041.6	10002.3	10560.6	10676.1	8925.1	6443.6	3358.1	1000.9
61°	12444.6	11947.4	11125.3	10756.8	10863.7	11310.7	11317.2	9269.7	6343.3	3026.6	861.3
62°	13057.3	12926.5	12063.0	11711.9	11679.2	12272.3	11984.5	9572.8	6256.1	2712.6	761.0
63°	13774.7	13774.7	12987.5	12712.8	12728.1	13196.9	12274.5	9875.9	6155.8	2365.9	669.4
64°	14147.6	14616.4	13890.3	13504.3	13604.6	14010.2	12791.3	10074.3	5846.1	2014.9	588.8
65°	14470.3	15174.7	14771.3	14592.5	14439.8	14679.7	13238.3	10259.6	5373.0	1713.9	523.3
66°	14742.9	15700.2	15567.2	15375.3	15360.0	15305.5	13325.5	10253.1	4884.5	1447.9	457.9
67°	14605.5	15711.1	15953.1	16033.8	16009.8	15434.2	13172.9	10019.8	4258.7	1223.3	407.8
67.5°	14481.2	15621.7	16184.3	16138.5	16238.8	15543.2	13199.1	9734.1	3813.8	1107.7	383.8
68°	14372.2	15501.8	16278.0	16336.9	16286.8	15556.3	13055.1	9507.3	3510.7	1040.1	362.0
69°	13545.8	14932.6	16127.6	16339.1	16210.4	15056.9	12597.2	8916.4	2789.0	887.5	333.6
70°	12717.2	14195.6	15397.1	15785.2	15626.0	14090.9	12019.4	7976.6	2300.5	758.8	300.9
71°	11570.2	12826.2	14424.5	14657.9	14466.0	12991.9	10824.4	6984.4	1790.3	643.3	268.2
72°	10013.2	11079.5	12605.9	13170.7	12887.2	11411.0	9616.4	5772.0	1450.1	540.8	244.2
72.5°	9241.3	10333.8	11805.7	11851.5	11906.0	10724.1	9103.9	5069.9	1264.7	501.5	237.7
73°	8508.6	9579.3	10852.8	11014.1	10783.0	9566.2	8338.5	4533.4	1155.7	457.9	229.0
74°	6895.0	7505.6	8561.0	8718.0	8515.2	7799.9	6814.3	3475.8	920.2	394.7	209.3
75°	5425.3	5761.1	6716.2	6620.2	6317.1	6066.4	5283.5	2655.9	745.8	346.7	194.1



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CANDELA DISTRIBUTION (continued):

	85°	87.5°	90°	92°	92.5°	95°	100°	105°	110°	115°	125°
77.5°	2437.9	2640.7	2799.9	2799.9	2817.3	2688.7	2435.7	1218.9	460.1	250.8	159.2
80°	928.9	1040.1	1075.0	1077.2	1092.5	1131.7	1053.2	599.7	272.6	178.8	128.7
82.5°	673.8	942.0	1014.0	961.6	966.0	872.2	403.4	266.0	172.3	124.3	93.8
85°	610.6	819.9	867.9	861.3	863.5	806.8	237.7	130.8	100.3	78.5	65.4
87.5°	296.6	290.0	307.5	346.7	338.0	438.3	200.6	65.4	43.6	32.7	32.7
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: CCW-SA-2E-850-U-T1

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	1857.9	1857.9	1857.9	1857.9	1857.9	1857.9
2.5°	1847.0	1844.8	1875.3	1844.8	1862.2	1849.1
5°	1868.8	1877.5	1884.0	1897.1	1866.6	1897.1
7.5°	1934.2	1942.9	1945.1	1956.0	1942.9	1940.7
10°	1984.3	2006.1	2019.2	1975.6	2001.8	1999.6
12.5°	2082.5	2060.6	2058.5	2049.7	2025.8	2017.0
15°	2152.2	2119.5	2099.9	2065.0	2036.7	2025.8
17.5°	2250.4	2187.1	2106.4	2034.5	1984.3	1945.1
20°	2311.4	2198.0	2036.7	1951.6	1875.3	1892.7
22.5°	2350.7	2187.1	1973.4	1864.4	1788.1	1809.9
25°	2363.8	2132.6	1929.8	1794.6	1720.5	1705.2
27.5°	2326.7	2069.4	1844.8	1692.1	1626.7	1639.8
30°	2309.2	1977.8	1766.3	1615.8	1528.6	1541.7
32.5°	2263.4	1884.0	1661.6	1509.0	1445.7	1423.9
35°	2198.0	1805.5	1561.3	1417.4	1341.1	1323.6
37.5°	2117.3	1707.4	1474.1	1299.6	1232.0	1218.9
40°	1997.4	1589.6	1347.6	1197.1	1118.6	1116.5
42.5°	1892.7	1476.3	1229.8	1075.0	996.5	1000.9
45°	1759.7	1323.6	1094.7	961.6	883.1	887.5
47.5°	1589.6	1181.9	966.0	817.7	752.3	747.9
50°	1389.0	1020.5	809.0	682.5	628.0	617.1
52.5°	1197.1	857.0	662.9	549.5	503.7	499.4
55°	955.1	667.3	516.8	431.8	396.9	399.0
56°	867.9	614.9	471.0	394.7	368.5	368.5
57°	785.0	545.1	427.4	364.2	340.2	340.2
58°	693.4	479.7	388.1	329.3	318.4	309.6
59°	630.2	436.1	351.1	311.8	294.4	292.2
60°	556.0	392.5	327.1	292.2	279.1	276.9
61°	492.8	353.3	300.9	272.6	268.2	268.2
62°	440.5	327.1	279.1	263.9	261.7	255.1
63°	394.7	300.9	268.2	250.8	244.2	250.8
64°	353.3	276.9	259.5	246.4	237.7	242.0
65°	320.5	266.0	248.6	239.9	231.1	233.3
66°	298.7	248.6	239.9	229.0	224.6	226.8
67°	270.4	239.9	231.1	220.2	218.1	220.2
67.5°	261.7	233.3	226.8	215.9	213.7	215.9
68°	255.1	229.0	224.6	213.7	211.5	209.3
69°	237.7	220.2	213.7	209.3	205.0	202.8
70°	222.4	211.5	207.2	200.6	196.3	194.1
71°	213.7	200.6	198.4	191.9	187.5	185.3
72°	202.8	194.1	189.7	181.0	178.8	181.0
72.5°	200.6	189.7	187.5	178.8	176.6	176.6
73°	194.1	181.0	183.2	174.4	170.1	174.4
74°	181.0	176.6	172.3	165.7	163.5	163.5
75°	170.1	165.7	161.4	157.0	157.0	157.0



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	135°	145°	155°	165°	175°	180°
77.5°	143.9	141.7	143.9	135.2	133.0	130.8
80°	115.6	115.6	117.8	111.2	106.8	104.7
82.5°	87.2	89.4	93.8	87.2	82.9	78.5
85°	56.7	58.9	58.9	52.3	61.1	56.7
87.5°	28.3	30.5	28.3	26.2	30.5	30.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)