

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: P677504

Luminaire Tested: **CCW-SA-1B-850-U-SLR-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677504
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1B-850-U-SLR-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
SLR distribution lens and House Side Shield
Light Source: (16) 5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2165.7 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

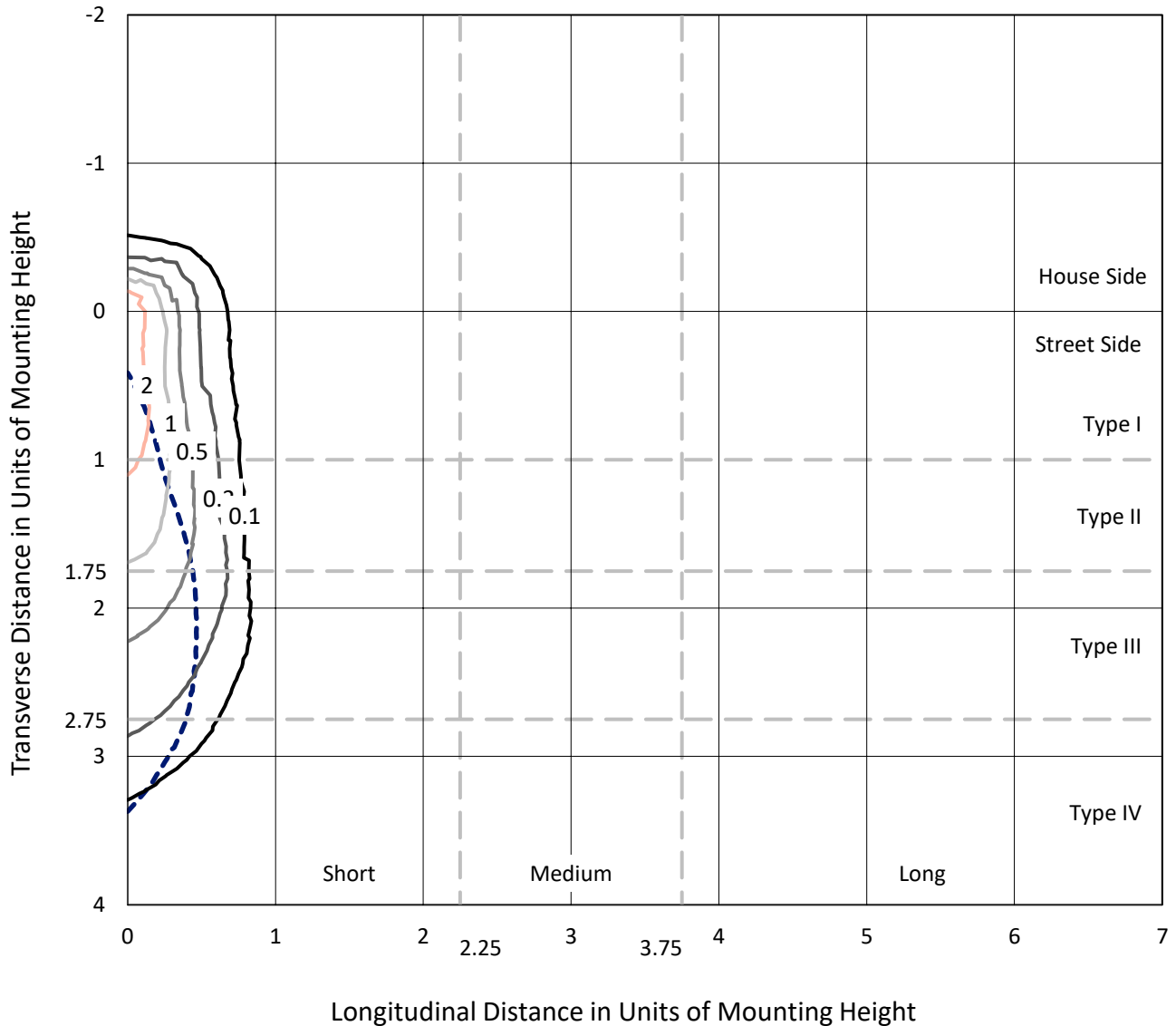
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

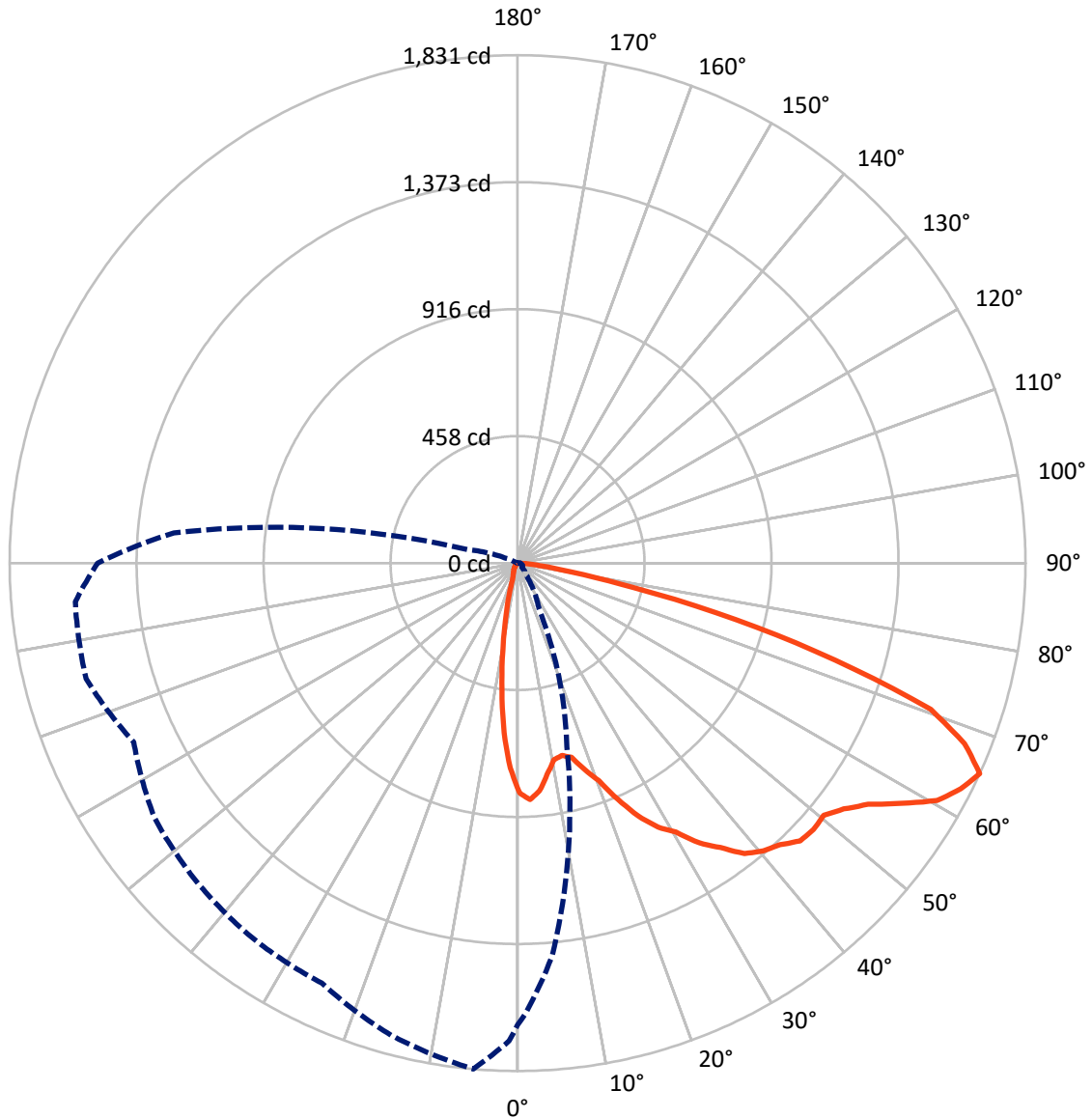
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	281.2	0.0	281.2
	% Fixture	13.0	0.0	13.0
Street Side	Lumens	1884.5	0.0	1884.5
	% Fixture	87.0	0.0	87.0
Total	Lumens	2165.7	0.0	2165.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.7	2.9
10°-20°	121.4	5.6
20°-30°	169.1	7.8
30°-40°	240.3	11.1
40°-50°	333.3	15.4
50°-60°	454.1	21.0
60°-70°	499.2	23.1
70°-80°	245.4	11.3
80°-90°	40.1	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°	2165.7	100.0
0°-180°	2165.7	100.0



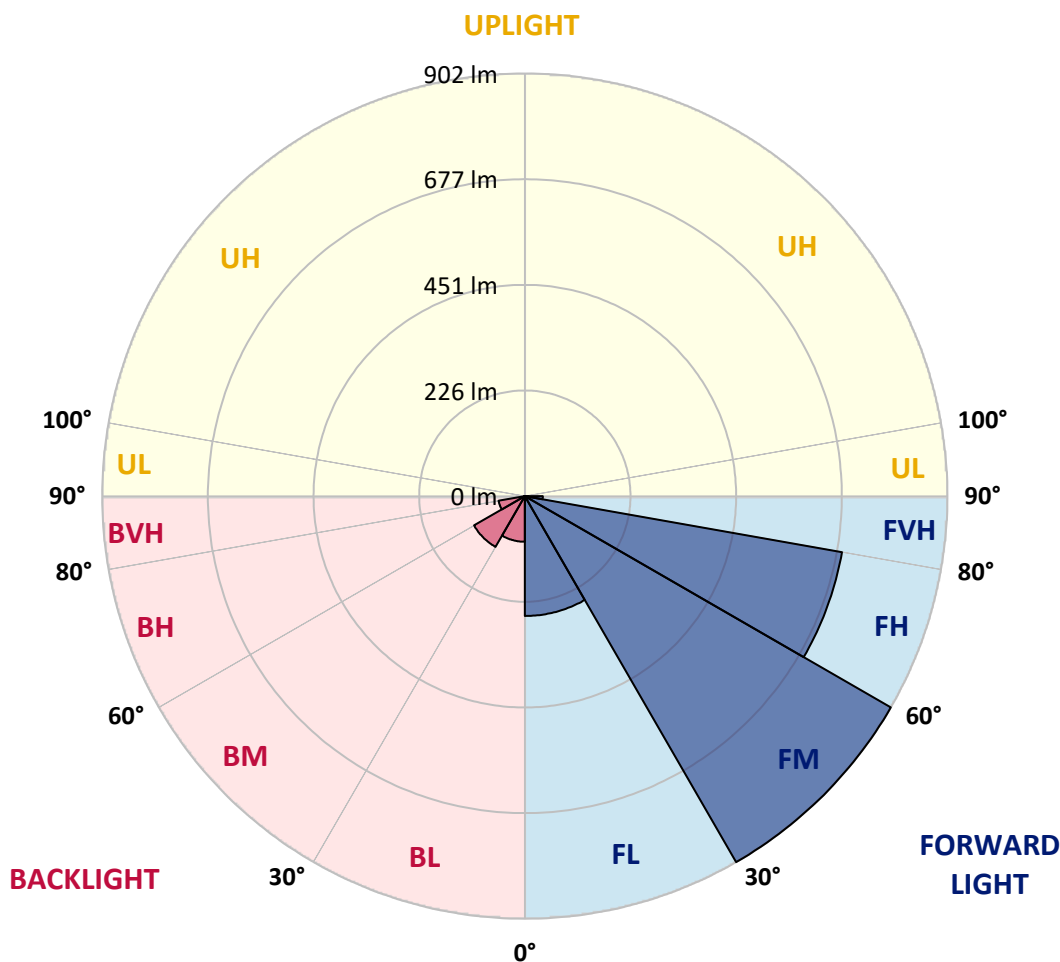
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	255.9	11.8			
FM (30°-60°)	902.5	41.7			
FH (60°-80°)	687.8	31.8			G1/1800
FVH (80°-90°)	38.3	1.8			G1/100
BL (0°-30°)	97.4	4.5	B0/110		
BM (30°-60°)	125.2	5.8	B0/220		
BH (60°-80°)	56.8	2.6	B0/110		G0/110
BVH (80°-90°)	1.8	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9
2.5°	844.9	854.8	845.5	812.8	806.9	791.2	767.2	765.5	740.4	743.3	729.8
5°	794.1	804.0	784.1	740.9	700.7	668.5	649.3	614.8	607.2	590.3	590.3
7.5°	742.1	741.5	707.7	671.5	611.3	552.3	525.5	475.9	446.7	430.9	415.7
10°	698.9	689.6	668.5	593.8	528.4	467.1	433.8	401.1	370.8	344.5	318.2
12.5°	668.5	674.4	641.1	559.9	475.3	432.7	397.0	362.6	326.4	296.6	267.4
15°	684.3	675.0	635.8	552.3	466.5	408.1	360.8	318.8	278.5	239.4	217.2
17.5°	733.3	709.4	663.3	552.3	448.4	370.8	313.5	263.9	220.7	185.7	158.2
20°	799.3	771.9	722.3	572.8	435.0	343.3	265.1	202.6	157.6	124.9	103.9
22.5°	867.1	845.5	770.7	581.0	419.2	306.5	209.0	146.6	105.1	84.1	73.6
25°	948.2	917.9	836.1	613.7	395.9	270.9	164.7	102.2	78.2	67.1	60.7
27.5°	1013.0	1007.8	897.4	633.5	378.4	241.7	130.2	81.2	64.8	56.6	52.5
30°	1094.8	1066.2	972.2	673.2	358.5	208.4	108.6	73.0	59.6	50.8	47.9
32.5°	1143.8	1130.4	1011.3	695.4	336.3	181.0	93.4	64.2	54.3	47.9	45.0
35°	1215.0	1188.2	1067.3	709.4	324.6	165.2	84.1	58.4	45.5	39.1	35.6
37.5°	1294.5	1284.5	1134.5	708.8	307.7	155.9	77.7	54.3	43.2	36.2	32.1
40°	1375.6	1335.3	1175.3	725.2	298.9	148.9	73.0	52.0	40.9	34.4	29.2
42.5°	1436.3	1390.2	1222.6	719.3	288.4	136.6	71.2	48.5	39.1	31.5	26.9
45°	1452.7	1436.3	1265.3	717.6	280.8	126.7	68.3	47.9	38.0	29.8	25.1
47.5°	1484.2	1473.1	1317.8	720.5	275.0	119.1	61.3	49.0	36.2	28.0	23.9
50°	1498.2	1478.4	1360.4	727.5	261.6	109.8	54.9	51.4	35.6	27.4	22.8
52.5°	1556.0	1538.5	1418.8	747.4	250.5	97.5	48.5	49.0	36.8	25.7	21.6
55°	1612.7	1592.8	1508.7	792.9	234.7	87.6	41.5	43.2	35.0	23.4	19.3
57.5°	1690.3	1657.6	1568.9	811.6	220.7	74.2	36.8	35.6	32.7	21.0	16.9
60°	1702.0	1715.4	1560.1	799.9	206.1	65.4	32.1	27.4	35.0	18.7	14.6
62.5°	1741.1	1685.1	1519.2	773.1	195.6	60.1	28.6	22.8	30.4	16.3	12.3
65°	1665.8	1624.3	1423.5	686.6	182.2	60.7	25.1	18.7	19.3	13.4	9.9
67.5°	1555.4	1522.8	1264.7	592.6	168.7	59.6	22.2	16.3	14.6	11.7	8.8
70°	1365.1	1294.5	1074.3	481.1	148.9	55.5	18.7	14.6	12.3	9.3	6.4
72.5°	993.2	964.6	770.7	371.9	133.7	50.2	17.5	12.3	10.5	7.0	5.3
75°	668.5	621.2	486.4	244.1	107.4	43.8	14.6	11.1	8.2	5.3	4.1
77.5°	353.2	334.0	275.6	116.2	59.6	20.4	8.2	6.4	4.7	4.1	2.3
80°	153.0	136.0	119.1	47.3	21.0	9.3	5.3	3.5	2.9	2.3	1.2
82.5°	78.2	74.7	61.9	20.4	12.3	7.0	2.9	2.3	1.8	1.2	0.6
85°	38.5	39.7	32.7	6.4	7.0	4.1	0.6	0.6	0.0	0.0	0.0
87.5°	2.9	2.9	2.3	1.2	1.8	0.6	0.0	0.0	0.0	0.0	0.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9
2.5°	724.6	732.8	718.8	727.5	723.4	725.2	726.9	722.3	723.4	739.8	740.4
5°	580.4	596.1	590.3	598.5	612.5	605.5	611.9	610.7	611.9	614.2	624.7
7.5°	414.0	409.3	420.4	442.0	467.1	482.3	474.7	470.6	468.3	462.4	469.4
10°	312.4	310.0	307.1	313.5	329.9	346.8	356.2	340.4	331.6	320.5	316.5
12.5°	259.2	244.6	236.5	226.5	231.2	246.4	247.0	231.8	217.8	211.9	218.4
15°	204.4	194.4	179.8	165.8	158.8	170.5	160.6	146.0	127.9	125.5	124.9
17.5°	146.0	140.1	129.6	123.8	115.6	112.7	102.2	80.0	67.1	63.6	64.8
20°	99.3	94.6	94.0	88.7	85.2	82.9	66.0	51.4	47.3	47.9	48.5
22.5°	73.6	71.2	68.3	67.7	64.8	61.9	48.5	43.2	40.3	40.3	42.0
25°	60.1	59.0	56.1	54.9	53.7	49.6	40.9	36.8	35.6	34.4	36.2
27.5°	51.4	50.8	49.0	47.3	46.1	42.0	35.6	32.1	30.9	30.9	30.9
30°	46.1	46.1	43.8	40.3	40.3	35.6	30.4	28.0	26.9	26.9	26.3
32.5°	43.2	42.0	39.1	36.8	35.0	30.4	26.9	24.5	22.8	22.8	23.4
35°	35.0	35.0	34.4	32.7	30.4	25.7	22.8	20.4	19.3	18.7	19.3
37.5°	30.9	29.2	26.9	27.4	26.3	22.2	19.3	17.5	15.8	15.8	15.8
40°	28.0	26.3	23.9	22.2	21.6	19.9	16.9	14.0	12.3	11.7	11.7
42.5°	25.1	23.9	20.4	17.5	16.9	16.9	12.8	10.5	8.8	8.8	8.8
45°	23.4	21.6	18.7	15.2	12.3	12.8	10.5	7.6	6.4	5.8	5.8
47.5°	22.2	20.4	16.3	12.8	9.3	9.3	7.6	5.3	4.1	3.5	3.5
50°	20.4	18.7	14.6	10.5	7.0	5.8	4.7	2.9	1.8	1.2	1.2
52.5°	19.3	17.5	12.8	8.8	5.8	4.1	2.9	0.6	0.0	0.0	0.0
55°	17.5	15.2	11.1	7.0	4.7	2.3	0.6	0.0	0.0	0.0	0.0
57.5°	15.2	13.4	8.8	5.3	2.9	0.6	0.0	0.0	0.0	0.0	0.0
60°	12.8	11.1	7.0	4.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	10.5	9.3	5.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	8.8	7.0	4.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	7.6	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	5.8	4.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	4.1	2.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9
2.5°	742.7	760.2	776.6	781.2	794.1	829.7	829.7	846.6	877.0	888.1	890.4
5°	626.5	645.2	648.7	684.9	701.8	738.0	762.0	819.2	853.6	875.2	888.7
7.5°	476.4	482.9	496.3	530.2	563.4	607.2	652.8	725.8	786.5	811.0	856.5
10°	327.6	346.8	376.0	406.4	458.3	506.8	565.8	634.7	709.4	739.8	778.9
12.5°	220.7	247.6	294.3	337.5	385.4	434.4	490.5	582.7	667.4	709.4	748.5
15°	129.0	161.7	202.0	272.1	335.7	390.6	446.7	540.1	642.8	697.1	745.0
17.5°	65.4	75.3	108.6	169.3	253.4	343.3	426.8	545.9	661.5	728.1	767.8
20°	49.0	52.0	61.3	89.9	173.4	283.8	408.1	554.7	713.5	794.7	816.3
22.5°	42.6	45.0	49.0	58.4	97.5	217.2	381.9	576.3	784.1	860.6	906.2
25°	36.2	38.5	42.0	47.9	62.5	147.7	349.7	599.1	847.2	943.5	986.2
27.5°	31.5	33.3	36.8	41.5	50.8	94.0	294.3	629.4	943.5	1044.0	1055.1
30°	26.9	28.6	31.5	36.8	43.2	66.6	216.0	633.5	996.7	1087.8	1118.7
32.5°	23.4	23.9	27.4	32.1	36.2	52.5	151.8	637.6	1035.8	1144.4	1150.8
35°	19.3	20.4	23.9	26.9	31.5	41.5	115.0	617.2	1086.6	1202.8	1201.0
37.5°	15.8	17.5	19.9	22.2	25.7	35.0	91.7	579.2	1150.2	1293.3	1238.4
40°	12.3	14.0	16.3	19.3	21.6	31.5	68.9	522.0	1216.8	1337.7	1279.3
42.5°	8.8	9.9	12.3	15.2	19.3	26.3	49.6	454.3	1243.1	1389.6	1328.3
45°	6.4	7.6	9.3	12.8	19.9	21.0	34.4	392.4	1271.1	1412.4	1317.2
47.5°	3.5	4.7	7.0	11.1	17.5	15.8	24.5	336.9	1303.2	1432.8	1326.0
50°	1.2	1.8	4.1	11.7	14.0	12.3	19.3	307.1	1334.7	1436.9	1343.5
52.5°	0.0	0.0	2.3	12.3	10.5	9.3	16.9	295.4	1326.6	1449.8	1332.4
55°	0.0	0.0	0.6	5.3	5.8	7.0	14.0	294.9	1384.4	1453.9	1393.1
57.5°	0.0	0.0	0.0	1.8	3.5	5.8	12.3	276.2	1421.2	1555.4	1474.9
60°	0.0	0.0	0.0	0.6	2.3	4.1	9.3	259.8	1458.5	1601.0	1562.5
62.5°	0.0	0.0	0.0	0.0	0.6	1.8	6.4	234.7	1383.2	1597.5	1647.1
65°	0.0	0.0	0.0	0.0	0.0	0.0	4.1	185.7	1244.2	1514.0	1600.4
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	128.5	1089.5	1408.9	1514.6
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.7	879.3	1235.5	1284.5
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	627.7	980.9	1053.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	388.3	717.0	806.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	251.7	543.0	612.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	134.3	340.4	395.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.4	206.7	238.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.7	125.5	143.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	25.7
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-1B-850-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9	827.9
2.5°	891.6	908.5	914.9	905.0	906.2	885.7	882.8	854.2	842.5	844.9
5°	932.5	957.0	970.4	959.3	934.2	895.1	859.5	825.6	804.6	794.1
7.5°	923.1	950.6	967.5	978.0	949.4	886.3	832.0	768.4	741.5	742.1
10°	871.7	928.9	963.4	950.0	936.5	873.5	789.4	720.5	696.6	698.9
12.5°	830.3	893.9	914.4	924.9	897.4	847.2	790.6	711.7	684.9	668.5
15°	804.6	851.9	853.0	869.4	858.3	858.3	802.8	725.8	702.4	684.3
17.5°	804.6	815.1	813.9	819.8	838.4	860.6	833.8	782.4	736.3	733.3
20°	822.7	790.0	782.4	784.7	800.5	866.5	902.1	837.9	808.7	799.3
22.5°	864.7	792.9	746.8	738.6	787.1	865.9	945.9	925.4	874.6	867.1
25°	922.5	787.6	737.4	726.9	763.7	886.9	1006.0	1010.1	964.0	948.2
27.5°	977.4	811.0	736.3	733.9	782.4	882.2	1047.5	1077.8	1025.9	1013.0
30°	996.1	834.4	757.9	726.9	789.4	899.2	1046.3	1125.7	1091.8	1094.8
32.5°	1018.3	857.7	760.2	747.9	819.2	926.6	1079.6	1202.8	1178.3	1143.8
35°	1051.0	889.2	782.4	771.3	840.2	951.1	1086.6	1259.4	1255.3	1215.0
37.5°	1079.0	920.2	828.5	830.3	904.4	990.8	1117.5	1328.9	1321.9	1294.5
40°	1098.9	963.4	900.3	905.0	960.5	1035.2	1172.4	1363.9	1415.9	1375.6
42.5°	1101.8	1001.9	982.7	1020.0	1072.0	1104.1	1194.6	1387.9	1462.6	1436.3
45°	1112.9	1063.2	1117.0	1144.4	1187.0	1164.8	1193.4	1428.7	1466.1	1452.7
47.5°	1156.1	1174.8	1242.5	1326.0	1341.2	1268.2	1221.5	1435.2	1486.0	1484.2
50°	1201.0	1294.5	1389.6	1445.1	1464.4	1339.4	1247.7	1429.9	1512.2	1498.2
52.5°	1251.2	1398.4	1535.6	1603.9	1593.4	1418.2	1277.5	1472.5	1560.7	1556.0
55°	1282.8	1445.1	1629.6	1724.8	1716.6	1506.4	1372.1	1533.8	1624.3	1612.7
57.5°	1366.3	1521.0	1723.0	1767.4	1789.0	1622.0	1438.1	1634.3	1677.5	1690.3
60°	1435.2	1570.6	1747.5	1811.8	1819.4	1690.9	1553.7	1737.6	1745.2	1702.0
62.5°	1536.2	1589.9	1695.6	1753.4	1792.5	1730.0	1657.6	1793.1	1744.0	1741.1
65°	1610.3	1526.8	1598.7	1630.8	1655.9	1670.5	1762.1	1831.0	1722.4	1665.8
67.5°	1568.9	1407.7	1394.3	1396.0	1403.6	1491.8	1727.1	1738.2	1602.2	1555.4
70°	1380.9	1154.9	1136.8	1150.8	1112.9	1219.1	1585.2	1580.0	1413.6	1365.1
72.5°	1117.0	842.0	811.0	830.3	839.0	951.7	1333.6	1198.1	1031.1	993.2
75°	887.5	617.2	520.8	567.5	597.3	693.1	1041.6	813.9	719.9	668.5
77.5°	697.1	467.1	405.2	386.5	414.0	503.9	757.9	427.4	377.2	353.2
80°	442.0	343.3	372.5	345.7	357.3	359.7	394.7	194.4	154.7	153.0
82.5°	266.2	234.7	279.1	153.6	279.7	249.9	164.1	88.2	78.2	78.2
85°	188.6	145.4	96.3	62.5	124.4	137.2	63.6	45.5	39.7	38.5
87.5°	94.6	45.0	21.6	14.0	15.8	25.7	7.6	3.5	3.5	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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