

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: P676308

Luminaire Tested: **CCW-SA-1B-827-U-T2-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676308  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1B-827-U-T2-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/  
T2 distribution lens and House Side Shield  
Light Source: (16) 2700K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

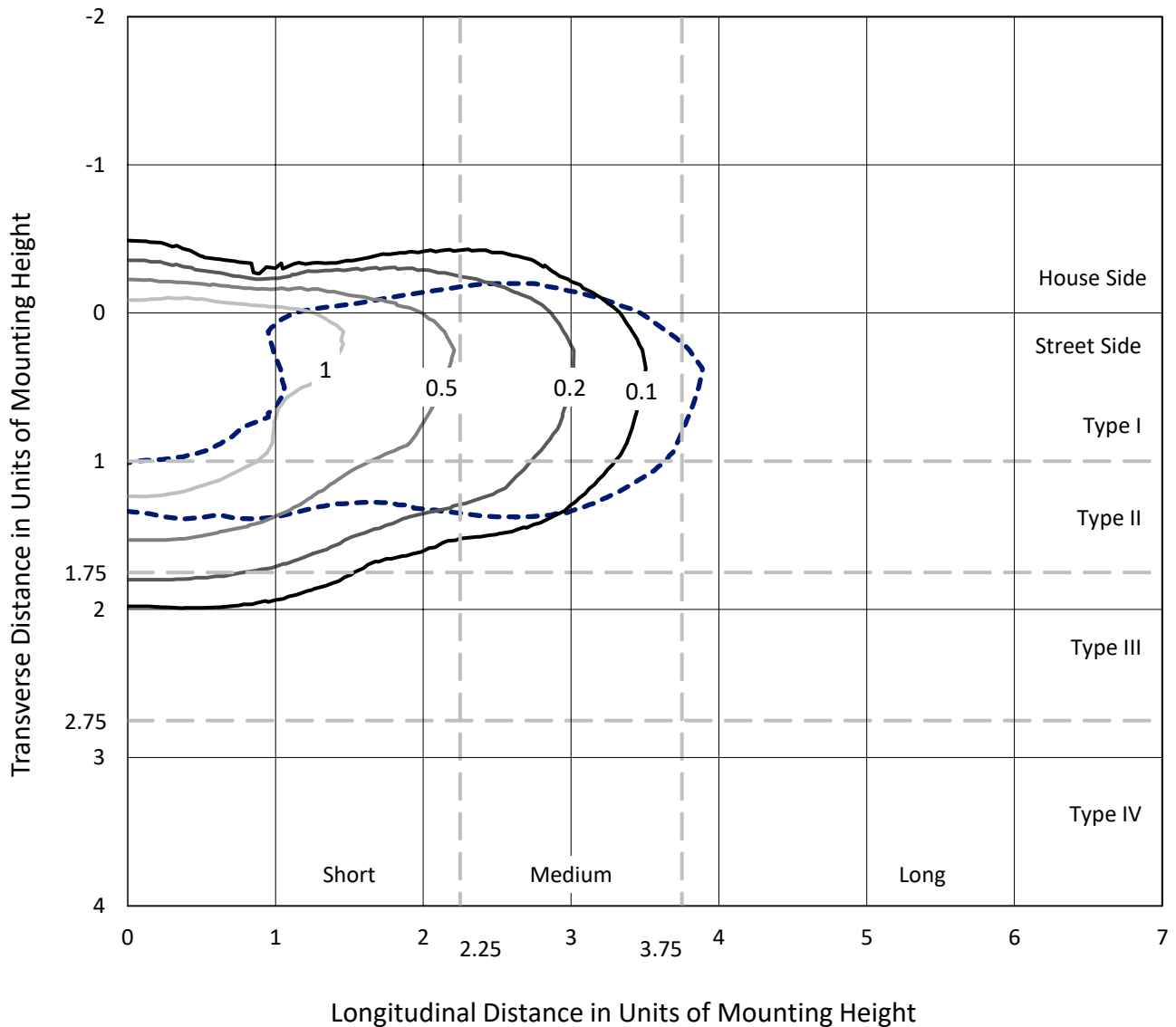
Lumens per Lamp: N/A  
Luminaire Lumens: 1960 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

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

REPORT NUMBER: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

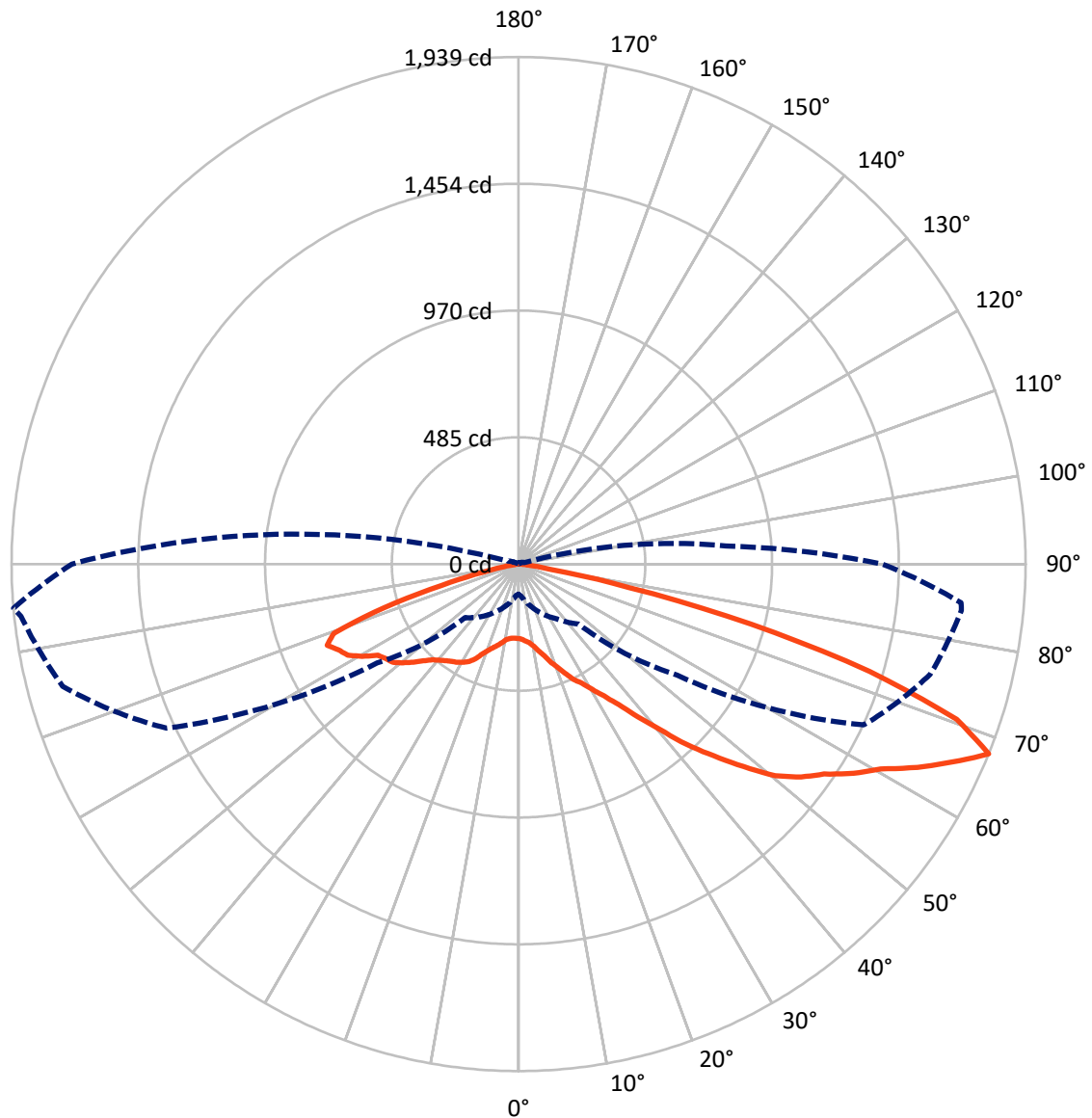
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.5 fc  
 Type II - Short - N/A

REPORT NUMBER: P676308  
CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

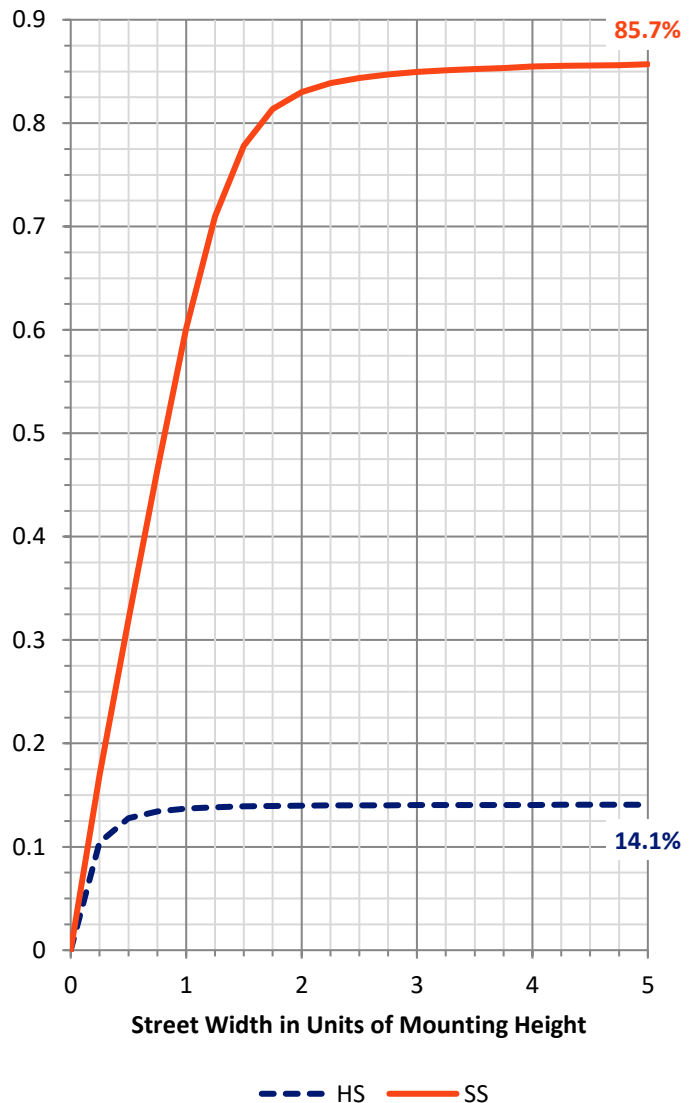
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	278.4	0.0	278.4
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	1681.6	0.0	1681.6
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	1960.0	0.0	1960.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.0	1.3
10°-20°	69.9	3.6
20°-30°	116.1	5.9
30°-40°	199.7	10.2
40°-50°	358.8	18.3
50°-60°	510.8	26.1
60°-70°	465.7	23.8
70°-80°	198.3	10.1
80°-90°	14.8	0.8
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°	1960.0	100.0
0°-180°	1960.0	100.0



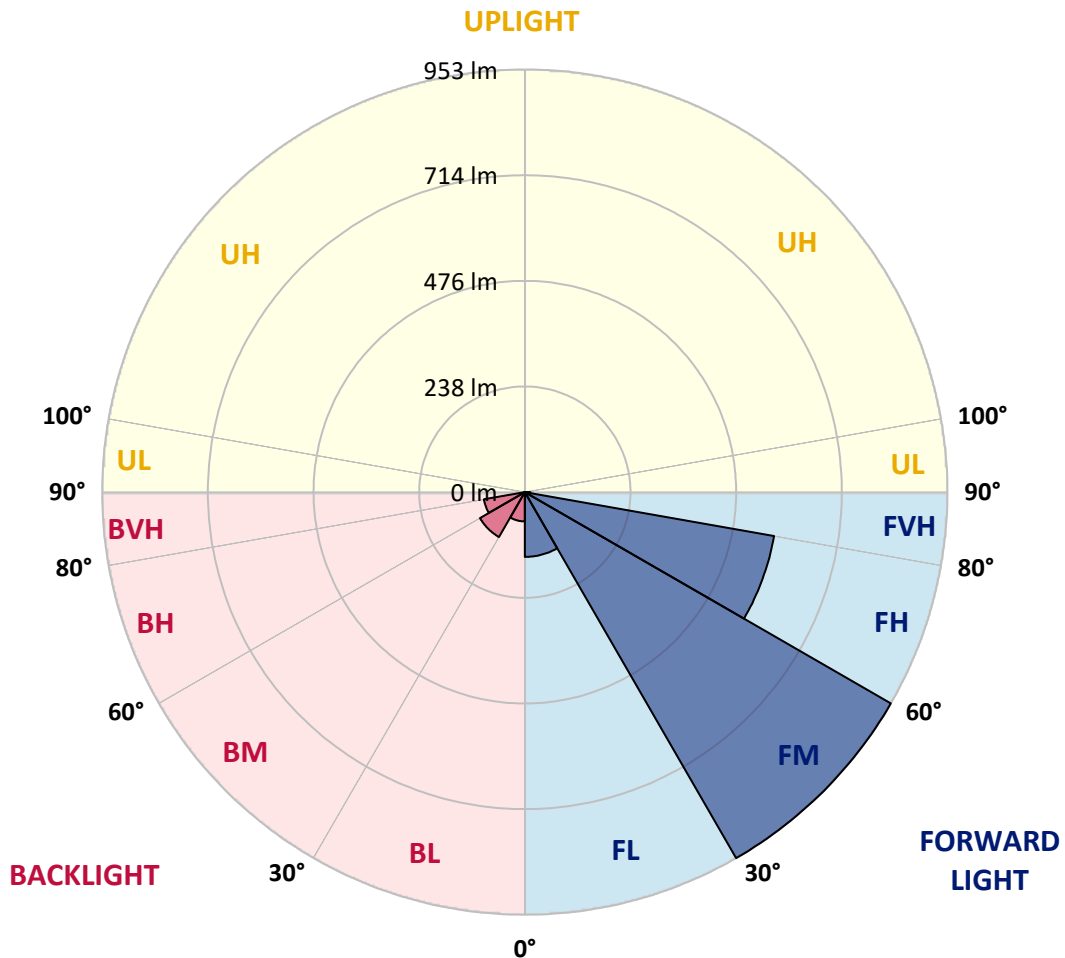
REPORT NUMBER: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	146.0	7.4			
FM (30°-60°)	952.6	48.6			
FH (60°-80°)	570.4	29.1			G0/660
FVH (80°-90°)	12.5	0.6			G1/100
BL (0°-30°)	65.9	3.4	B0/110		
BM (30°-60°)	116.7	6.0	B0/220		
BH (60°-80°)	93.6	4.8	B0/110		G0/110
BVH (80°-90°)	2.2	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 II Short





REPORT NUMBER: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	295.3	298.1	298.1	297.2	294.4	292.5	291.6	289.7	287.8	287.8	288.8
5°	298.1	295.3	299.0	294.4	294.4	294.4	298.1	296.2	295.3	290.6	290.6
7.5°	298.1	295.3	295.3	298.1	295.3	297.2	301.8	300.0	303.7	295.3	297.2
10°	289.7	288.8	290.6	294.4	295.3	299.0	303.7	313.0	314.0	308.4	307.4
12.5°	272.9	271.9	278.5	280.3	291.6	300.9	314.9	322.4	330.8	328.0	322.4
15°	260.7	262.6	267.3	274.7	285.0	301.8	317.7	334.5	349.5	345.8	343.9
17.5°	265.4	264.5	265.4	270.1	283.1	300.0	327.1	346.7	368.2	368.2	370.1
20°	279.4	282.2	281.3	278.5	285.0	299.0	327.1	361.6	397.2	394.3	394.3
22.5°	303.7	304.6	299.0	297.2	296.2	304.6	332.7	380.3	421.4	427.1	425.2
25°	328.9	329.9	328.0	322.4	314.9	316.8	343.0	395.3	455.1	464.4	462.6
27.5°	371.0	370.1	365.4	358.8	347.6	339.2	358.8	406.5	481.3	497.1	492.5
30°	413.0	410.2	403.7	395.3	385.0	369.1	378.5	428.0	514.0	528.9	518.6
32.5°	464.4	458.8	460.7	447.6	426.1	400.9	399.0	447.6	540.1	561.6	553.2
35°	529.8	523.3	514.0	501.8	481.3	447.6	437.3	479.4	584.0	599.9	599.9
37.5°	615.8	622.4	611.1	560.7	538.3	506.5	485.0	512.1	622.4	660.7	651.3
40°	703.7	709.3	688.7	651.3	602.7	563.5	550.4	565.4	680.3	726.1	708.3
42.5°	774.7	782.2	774.7	726.1	687.8	637.3	613.9	628.0	755.1	810.2	786.8
45°	849.4	856.9	848.5	816.7	779.3	750.4	691.5	709.3	833.5	915.8	889.6
47.5°	905.5	914.8	899.9	893.4	863.5	858.8	758.8	778.4	915.8	1022.3	989.6
50°	918.6	928.9	941.9	949.4	939.1	950.4	849.4	866.3	1001.8	1120.4	1088.7
52.5°	887.7	898.0	927.0	961.6	1009.2	1042.9	941.0	955.0	1091.5	1201.7	1184.9
55°	797.1	806.4	865.3	912.0	1026.0	1081.2	1028.9	1087.7	1155.9	1286.8	1245.7
57.5°	644.8	656.0	733.6	805.5	970.0	1059.7	1081.2	1198.0	1262.5	1349.4	1301.7
60°	457.9	464.4	531.7	658.8	814.9	952.2	1070.9	1280.2	1346.6	1433.5	1408.2
62.5°	263.5	269.1	339.2	458.8	614.9	795.2	1025.1	1357.8	1437.2	1526.0	1512.0
65°	174.7	176.6	224.3	289.7	400.0	585.9	909.2	1426.9	1526.9	1599.8	1583.9
67.5°	114.9	125.2	162.6	207.5	256.0	324.3	741.0	1455.9	1629.7	1702.6	1698.9
70°	82.2	86.0	116.8	159.8	192.5	182.2	433.6	1251.3	1625.0	1730.6	1699.8
72.5°	48.6	52.3	77.6	119.6	151.4	115.9	202.8	884.9	1346.6	1381.1	1372.7
75°	35.5	35.5	47.7	86.0	110.3	83.2	95.3	559.7	894.3	970.9	970.0
77.5°	25.2	26.2	32.7	51.4	85.0	60.7	52.3	311.2	488.7	534.5	509.3
80°	15.0	15.9	22.4	30.8	61.7	43.9	34.6	142.0	187.8	189.7	180.4
82.5°	11.2	11.2	15.0	21.5	43.0	29.9	21.5	54.2	60.7	55.1	46.7
85°	6.5	5.6	11.2	15.9	25.2	16.8	15.0	25.2	28.0	20.6	18.7
87.5°	1.9	1.9	4.7	5.6	11.2	9.3	6.5	9.3	13.1	7.5	5.6
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: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	286.9	284.1	279.4	277.5	271.0	268.2	266.3	261.7	262.6	259.8	259.8
5°	284.1	284.1	274.7	264.5	254.2	247.6	240.2	230.8	230.8	227.1	228.0
7.5°	294.4	286.9	274.7	256.0	239.2	224.3	217.7	208.4	202.8	200.0	200.0
10°	300.9	293.4	272.9	250.4	228.9	210.3	196.2	183.2	175.7	175.7	174.7
12.5°	318.7	307.4	280.3	249.5	217.7	189.7	168.2	153.3	143.0	135.5	137.4
15°	333.6	321.5	284.1	242.0	198.1	158.9	132.7	104.7	90.6	83.2	80.4
17.5°	357.0	334.5	292.5	228.9	168.2	124.3	86.0	62.6	57.0	56.1	56.1
20°	376.6	350.4	293.4	203.7	138.3	79.4	55.1	51.4	48.6	47.7	46.7
22.5°	403.7	371.0	289.7	174.7	99.1	53.3	46.7	43.0	41.1	38.3	38.3
25°	431.7	398.1	282.2	147.6	60.7	45.8	41.1	37.4	33.6	31.8	32.7
27.5°	461.6	418.6	260.7	114.9	46.7	40.2	33.6	30.8	29.0	28.0	28.0
30°	485.9	431.7	228.9	76.6	42.1	35.5	29.9	27.1	25.2	24.3	24.3
32.5°	503.7	442.9	193.4	51.4	38.3	31.8	27.1	24.3	22.4	21.5	21.5
35°	533.6	451.3	160.7	43.9	34.6	28.0	23.4	21.5	19.6	19.6	19.6
37.5°	579.4	462.6	128.0	40.2	31.8	25.2	22.4	19.6	18.7	17.8	17.8
40°	619.6	476.6	91.6	36.4	29.0	23.4	19.6	17.8	16.8	15.9	15.9
42.5°	677.5	492.5	59.8	32.7	26.2	21.5	17.8	15.9	15.0	14.0	14.0
45°	751.3	518.6	46.7	29.0	23.4	19.6	16.8	15.0	13.1	13.1	12.1
47.5°	829.8	550.4	42.1	27.1	21.5	17.8	15.0	13.1	12.1	11.2	11.2
50°	902.7	581.2	39.2	25.2	19.6	16.8	14.0	12.1	10.3	9.3	9.3
52.5°	968.1	610.2	37.4	23.4	18.7	15.0	12.1	10.3	9.3	8.4	8.4
55°	1002.7	623.3	36.4	22.4	16.8	14.0	11.2	9.3	8.4	7.5	7.5
57.5°	1056.9	640.1	35.5	21.5	15.9	12.1	10.3	8.4	7.5	6.5	6.5
60°	1144.7	695.2	34.6	20.6	15.0	12.1	9.3	7.5	5.6	4.7	4.7
62.5°	1217.6	741.0	30.8	17.8	13.1	10.3	7.5	5.6	3.7	2.8	2.8
65°	1300.8	762.5	27.1	15.9	11.2	8.4	5.6	3.7	2.8	0.9	0.9
67.5°	1391.4	795.2	22.4	14.0	10.3	6.5	4.7	2.8	0.9	0.0	0.0
70°	1343.8	754.1	18.7	12.1	9.3	5.6	3.7	1.9	0.0	0.0	0.0
72.5°	1053.1	540.1	15.0	11.2	8.4	5.6	3.7	0.9	0.0	0.0	0.0
75°	703.7	305.6	13.1	9.3	6.5	4.7	2.8	0.9	0.0	0.0	0.0
77.5°	382.2	137.4	11.2	8.4	5.6	3.7	2.8	0.9	0.0	0.0	0.0
80°	124.3	54.2	9.3	7.5	5.6	3.7	2.8	0.9	0.0	0.0	0.0
82.5°	33.6	16.8	9.3	7.5	5.6	3.7	2.8	0.9	0.0	0.0	0.0
85°	14.0	11.2	9.3	7.5	5.6	3.7	2.8	0.9	0.0	0.0	0.0
87.5°	5.6	3.7	3.7	4.7	3.7	2.8	1.9	0.9	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





REPORT NUMBER: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	260.7	262.6	263.5	263.5	268.2	272.9	278.5	283.1	283.1	285.9	288.8
5°	228.9	230.8	233.6	242.0	251.4	261.7	271.9	279.4	289.7	294.4	297.2
7.5°	202.8	204.6	212.1	220.5	233.6	251.4	269.1	285.9	296.2	300.9	304.6
10°	175.7	178.5	186.9	201.8	218.7	240.2	260.7	289.7	306.5	315.9	319.6
12.5°	136.4	143.9	155.1	171.0	192.5	225.2	263.5	293.4	322.4	333.6	341.1
15°	86.0	92.5	110.3	135.5	164.5	202.8	256.0	299.0	339.2	350.4	362.6
17.5°	55.1	56.1	61.7	88.8	126.2	174.7	244.8	307.4	357.9	373.8	392.5
20°	46.7	48.6	49.5	53.3	84.1	143.9	221.5	317.7	380.3	401.8	419.6
22.5°	39.2	40.2	42.1	44.9	50.5	104.7	189.7	317.7	400.0	431.7	452.3
25°	31.8	33.6	35.5	38.3	43.9	65.4	157.0	312.1	423.3	462.6	488.7
27.5°	28.0	28.0	29.9	32.7	37.4	45.8	124.3	295.3	441.1	481.3	515.8
30°	24.3	25.2	26.2	29.0	33.6	40.2	86.0	268.2	459.8	517.7	556.9
32.5°	21.5	21.5	23.4	25.2	29.9	36.4	55.1	227.1	484.1	545.7	600.9
35°	19.6	19.6	20.6	22.4	27.1	32.7	43.0	192.5	513.0	599.0	659.7
37.5°	17.8	17.8	18.7	20.6	24.3	29.0	39.2	165.4	542.9	652.3	741.0
40°	15.9	15.9	16.8	18.7	21.5	26.2	35.5	133.6	580.3	730.8	829.8
42.5°	14.0	14.0	15.0	16.8	19.6	23.4	30.8	100.0	629.8	815.8	944.8
45°	12.1	12.1	13.1	15.0	16.8	21.5	28.0	76.6	684.0	910.2	1045.7
47.5°	10.3	11.2	12.1	14.0	15.9	19.6	25.2	67.3	737.3	1010.2	1157.8
50°	9.3	9.3	10.3	12.1	15.0	17.8	23.4	66.3	791.5	1086.8	1272.7
52.5°	8.4	8.4	9.3	11.2	14.0	16.8	22.4	68.2	836.4	1157.8	1353.1
55°	7.5	7.5	8.4	9.3	12.1	15.9	20.6	70.1	868.1	1229.8	1417.6
57.5°	6.5	6.5	7.5	9.3	11.2	14.0	18.7	72.0	919.5	1300.8	1511.0
60°	4.7	4.7	6.5	8.4	10.3	12.1	17.8	73.8	1001.8	1398.9	1590.5
62.5°	2.8	2.8	3.7	6.5	8.4	11.2	15.9	70.1	1078.4	1525.1	1712.0
65°	0.9	1.9	2.8	3.7	6.5	9.3	13.1	63.5	1142.9	1651.2	1824.1
67.5°	0.0	0.0	0.9	2.8	5.6	7.5	11.2	46.7	1153.1	1708.2	1939.0
70°	0.0	0.0	0.9	2.8	4.7	7.5	10.3	26.2	982.1	1526.0	1777.4
72.5°	0.0	0.0	0.0	1.9	4.7	6.5	9.3	19.6	724.2	1150.3	1404.5
75°	0.0	0.0	0.0	0.9	3.7	5.6	8.4	15.0	440.1	767.2	916.7
77.5°	0.0	0.0	0.0	0.9	2.8	5.6	8.4	13.1	155.1	365.4	430.8
80°	0.0	0.0	0.0	1.9	3.7	5.6	7.5	11.2	37.4	91.6	123.4
82.5°	0.0	0.0	0.0	0.9	2.8	4.7	6.5	9.3	15.0	27.1	43.0
85°	0.0	0.0	0.0	0.9	1.9	4.7	6.5	8.4	10.3	13.1	18.7
87.5°	0.0	0.0	0.0	0.0	0.9	1.9	2.8	3.7	3.7	3.7	6.5
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: P676308  
 CATALOG NUMBER: CCW-SA-1B-827-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	287.8	291.6	293.4	297.2	299.0	298.1	297.2	300.0	298.1	295.3
5°	298.1	298.1	300.9	301.8	301.8	299.0	300.9	300.0	298.1	298.1
7.5°	309.3	314.0	314.0	308.4	307.4	305.6	305.6	298.1	295.3	298.1
10°	320.5	324.3	325.2	318.7	310.2	306.5	301.8	292.5	287.8	289.7
12.5°	343.9	343.9	333.6	326.1	314.9	301.8	290.6	277.5	271.0	272.9
15°	360.7	364.4	350.4	333.6	314.0	289.7	277.5	267.3	263.5	260.7
17.5°	393.4	385.9	363.5	339.2	311.2	285.9	277.5	268.2	265.4	265.4
20°	421.4	417.7	384.1	340.1	310.2	293.4	287.8	283.1	282.2	279.4
22.5°	459.8	442.9	400.0	350.4	320.5	305.6	303.7	308.4	305.6	303.7
25°	488.7	474.7	412.1	365.4	336.4	331.7	334.5	339.2	331.7	328.9
27.5°	528.0	501.8	435.5	385.0	357.9	362.6	371.9	372.9	368.2	371.0
30°	564.4	536.4	453.2	407.4	394.3	399.0	413.0	423.3	416.8	413.0
32.5°	616.8	573.8	488.7	444.8	440.1	452.3	468.2	474.7	466.3	464.4
35°	671.9	616.8	525.2	486.9	495.3	512.1	526.1	537.3	524.2	529.8
37.5°	757.9	685.9	586.8	553.2	556.9	563.5	589.7	620.5	627.0	615.8
40°	847.6	760.7	643.9	617.7	626.1	643.9	674.7	703.7	718.6	703.7
42.5°	951.3	832.6	731.7	700.9	709.3	734.5	775.6	799.0	797.1	774.7
45°	1079.3	932.6	813.9	775.6	806.4	828.9	870.0	872.8	855.0	849.4
47.5°	1177.4	1016.7	902.7	878.4	920.5	921.4	930.7	931.7	912.0	905.5
50°	1285.8	1113.9	1001.8	966.2	1037.3	1004.6	979.3	962.5	932.6	918.6
52.5°	1392.4	1183.0	1093.3	1056.9	1130.7	1043.8	998.0	946.6	902.7	887.7
55°	1449.4	1297.0	1227.0	1141.9	1151.3	1055.0	940.1	875.6	800.8	797.1
57.5°	1516.6	1373.7	1340.0	1199.9	1116.7	976.5	819.5	734.5	654.1	644.8
60°	1596.1	1495.2	1459.6	1190.5	994.3	820.5	649.5	540.1	464.4	457.9
62.5°	1684.9	1639.1	1533.5	1098.9	789.6	577.5	428.9	337.3	267.3	263.5
65°	1825.0	1759.6	1572.7	925.1	522.4	370.1	285.0	218.7	176.6	174.7
67.5°	1912.9	1805.4	1484.9	659.7	289.7	244.8	200.0	158.9	122.4	114.9
70°	1788.6	1656.8	1174.6	377.5	168.2	186.0	154.2	106.5	84.1	82.2
72.5°	1428.8	1229.8	790.6	177.5	104.7	145.8	112.1	72.0	50.5	48.6
75°	974.7	773.7	496.2	82.2	73.8	106.5	82.2	42.1	35.5	35.5
77.5°	435.5	394.3	254.2	50.5	55.1	81.3	47.7	29.0	26.2	25.2
80°	132.7	139.2	103.7	34.6	41.1	61.7	29.0	19.6	15.9	15.0
82.5°	44.9	52.3	46.7	20.6	28.0	43.9	19.6	13.1	11.2	11.2
85°	21.5	26.2	23.4	13.1	15.0	21.5	15.9	10.3	6.5	6.5
87.5°	8.4	12.1	8.4	5.6	8.4	11.2	6.5	4.7	1.9	1.9
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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