

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: P676784

Luminaire Tested: **CCW-SA-1B-850-U-T4W-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676784
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-T4W-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
T4W 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: 2174.3 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B0 - U0 - G1

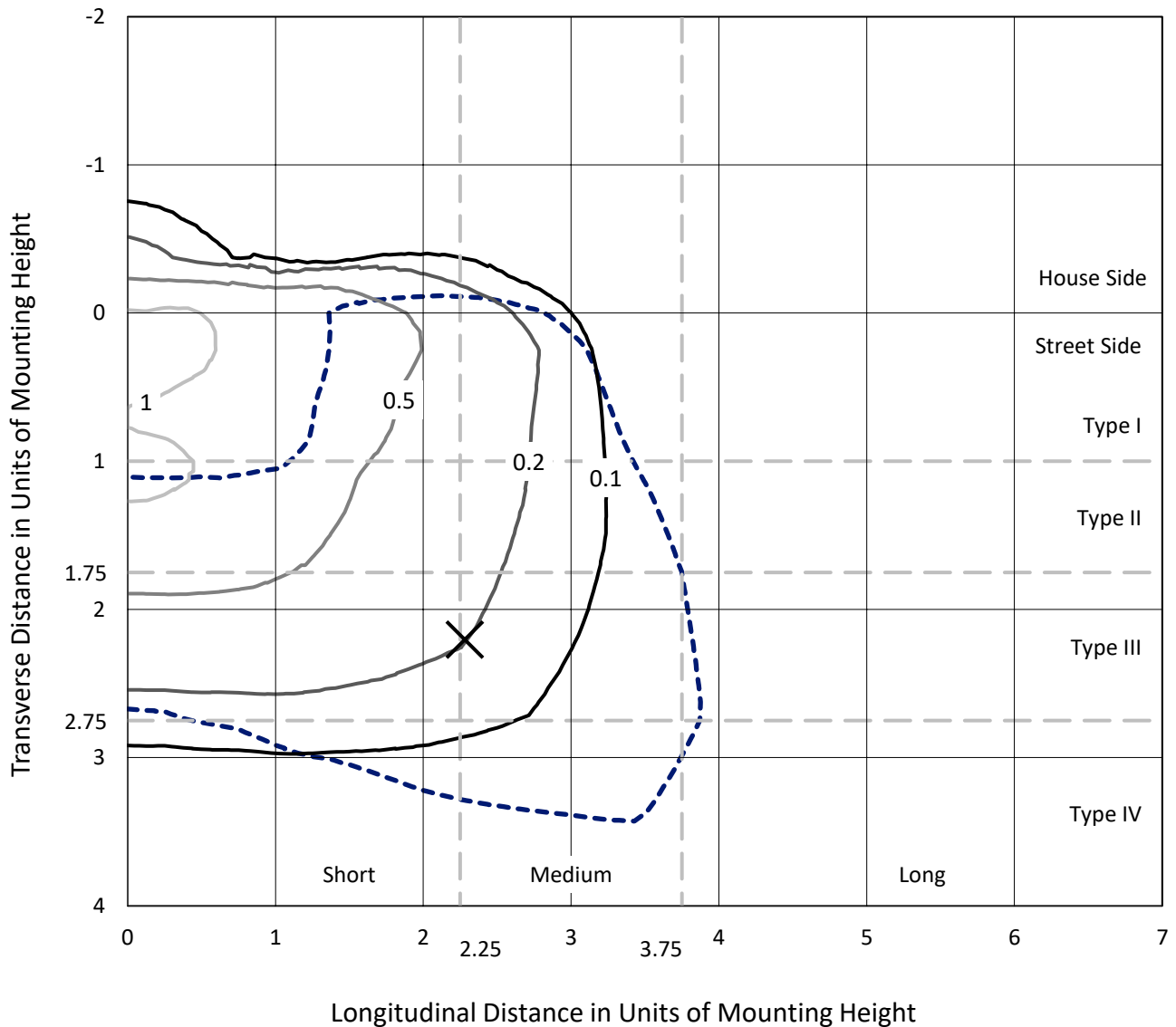
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

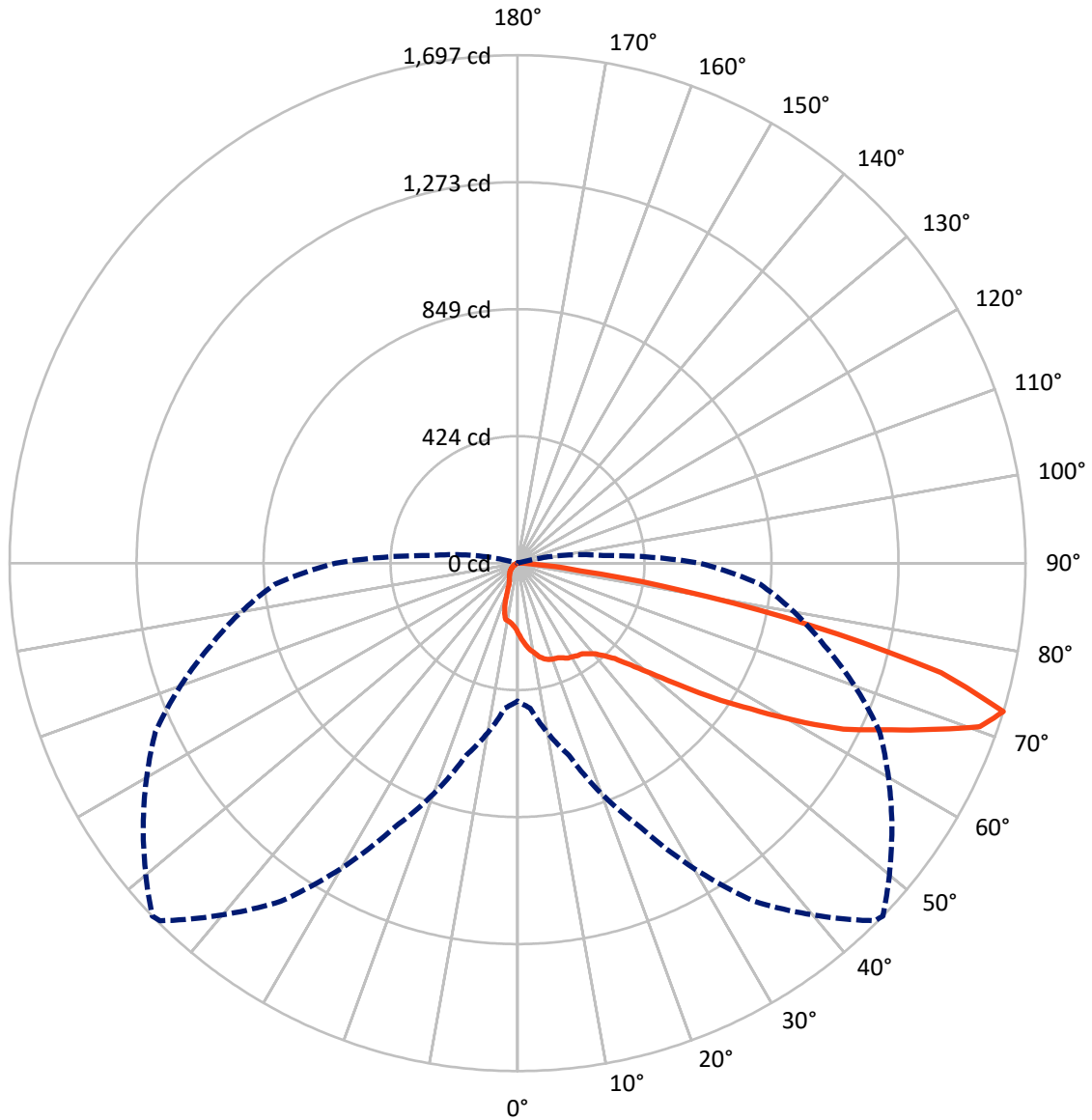
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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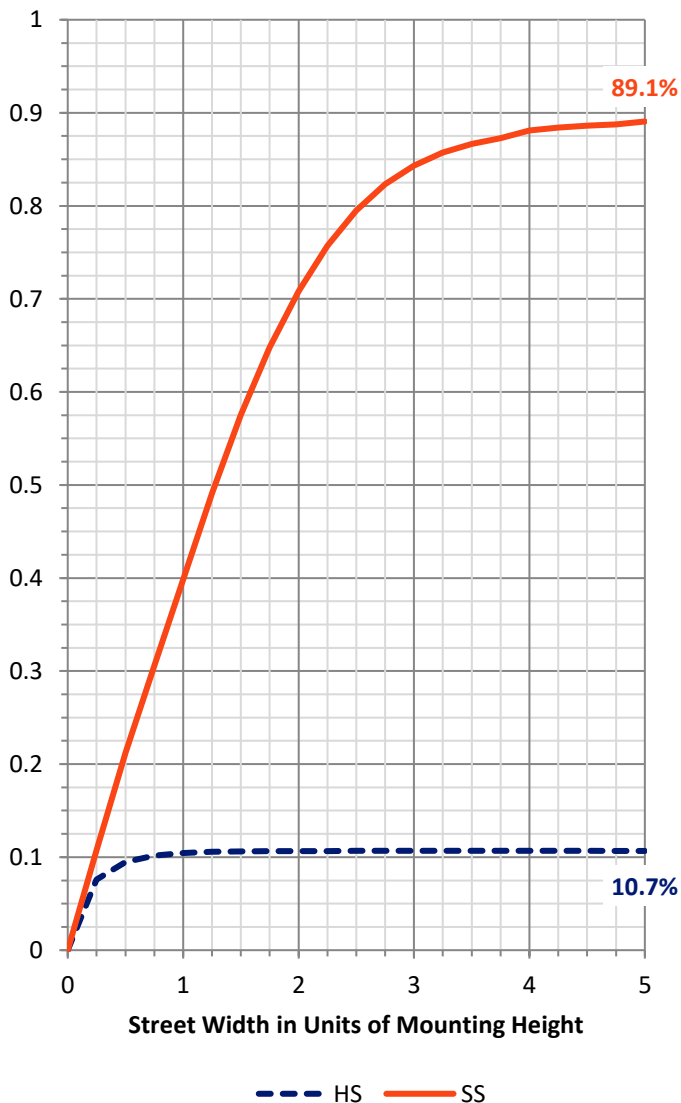
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	234.1	0.0	234.1
	% Fixture	10.8	0.0	10.8
Street Side	Lumens	1940.2	0.0	1940.2
	% Fixture	89.2	0.0	89.2
Total	Lumens	2174.3	0.0	2174.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	1.1
10°-20°	70.2	3.2
20°-30°	109.9	5.1
30°-40°	153.9	7.1
40°-50°	253.9	11.7
50°-60°	456.3	21.0
60°-70°	661.3	30.4
70°-80°	412.7	19.0
80°-90°	32.7	1.5
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°	2174.3	100.0
0°-180°	2174.3	100.0



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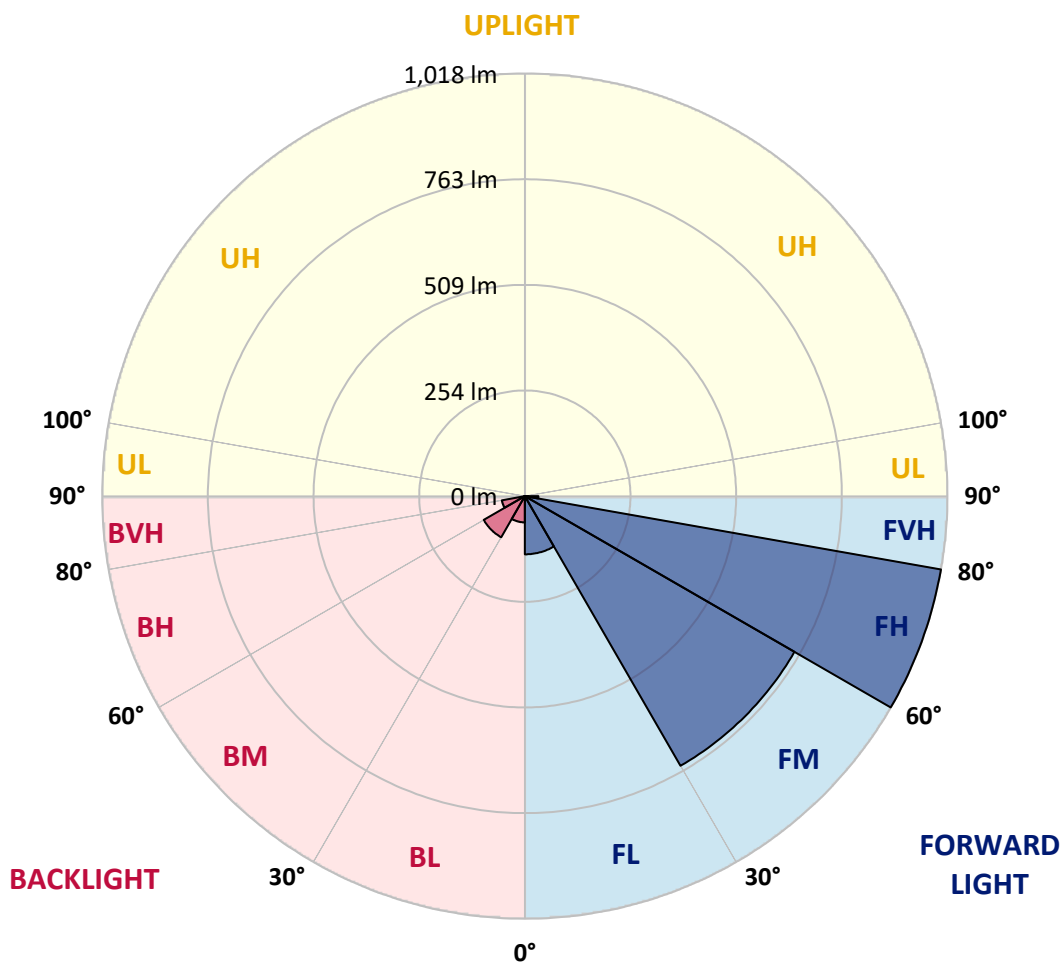
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	140.1	6.4			
FM (30°-60°)	749.7	34.5			
FH (60°-80°)	1017.8	46.8			G1/1800
FVH (80°-90°)	32.5	1.5			G1/100
BL (0°-30°)	63.3	2.9	B0/110		
BM (30°-60°)	114.4	5.3	B0/220		
BH (60°-80°)	56.3	2.6	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4
2.5°	260.1	259.0	260.7	260.1	253.5	254.6	254.0	249.6	241.8	237.4	234.6
5°	290.1	292.8	290.6	285.6	281.7	274.0	272.9	265.7	253.5	245.7	237.4
7.5°	321.1	321.1	316.7	308.9	300.6	292.3	291.2	279.0	268.4	255.1	243.5
10°	344.4	341.6	338.3	330.0	320.6	309.5	303.9	295.0	283.4	267.3	252.3
12.5°	364.9	360.5	354.9	342.7	331.6	319.4	320.6	306.1	298.4	284.0	261.8
15°	376.6	372.7	367.7	356.6	339.4	333.9	331.6	322.8	308.9	294.5	273.4
17.5°	379.3	376.6	369.9	355.5	346.1	339.4	338.9	328.3	322.2	310.0	286.7
20°	373.8	368.8	363.8	354.4	345.5	343.3	341.6	341.6	333.9	317.8	295.0
22.5°	364.4	358.8	356.1	350.5	343.3	342.7	343.8	342.7	336.6	326.1	303.9
25°	357.2	354.4	350.0	348.3	343.8	352.2	350.5	348.8	347.2	335.0	317.8
27.5°	359.4	358.8	355.5	348.8	345.5	354.4	359.4	359.9	359.4	347.2	330.5
30°	360.5	357.7	354.4	352.7	353.8	362.7	362.7	374.9	369.9	357.7	343.3
32.5°	373.2	371.6	360.5	356.6	357.2	367.7	368.3	380.5	378.8	370.5	354.4
35°	400.4	389.3	373.2	362.2	362.2	376.0	371.6	389.3	393.8	380.5	362.2
37.5°	440.9	432.6	403.7	378.8	369.4	379.3	383.8	393.8	407.1	395.4	377.7
40°	521.3	519.7	478.6	424.8	387.7	396.5	398.2	413.7	422.6	406.5	401.5
42.5°	638.9	630.6	592.3	507.5	420.9	417.1	423.2	433.1	454.2	440.9	428.7
45°	753.7	749.8	711.5	616.7	481.4	458.1	454.8	472.5	503.6	489.2	479.7
47.5°	836.9	829.1	807.5	727.6	570.1	506.3	508.6	526.3	565.7	554.6	557.4
50°	900.7	896.8	874.0	830.2	682.2	582.3	577.9	595.6	648.9	656.1	663.9
52.5°	970.5	977.8	947.3	910.1	814.7	684.4	674.4	680.5	749.3	765.9	787.5
55°	1037.6	1049.3	1018.8	1013.8	953.4	797.5	795.8	781.4	870.2	872.4	884.0
57.5°	1081.5	1077.6	1075.4	1102.5	1092.0	927.3	919.0	904.5	985.0	970.5	1005.5
60°	1084.8	1095.9	1133.0	1200.1	1219.0	1079.8	1067.6	1028.2	1084.2	1049.9	1116.4
62.5°	1109.7	1118.6	1187.4	1280.0	1304.4	1214.0	1222.3	1122.5	1169.1	1141.9	1239.5
65°	1046.5	1074.3	1212.3	1342.1	1416.4	1349.9	1341.6	1244.0	1256.2	1230.6	1361.0
67.5°	989.4	999.9	1144.1	1361.0	1505.2	1486.3	1483.0	1351.6	1346.0	1298.9	1395.4
70°	804.2	816.9	959.5	1264.5	1535.1	1645.5	1637.7	1502.4	1407.0	1261.7	1219.0
72.5°	460.9	486.4	665.0	973.9	1379.3	1689.9	1697.1	1526.8	1334.9	1060.9	814.1
75°	150.9	158.1	276.2	551.8	1031.5	1474.1	1461.4	1312.2	1077.0	700.5	367.7
77.5°	51.0	52.1	81.5	199.7	571.8	996.1	1003.3	937.8	661.6	291.2	101.5
80°	26.1	27.7	39.9	74.9	235.1	542.4	554.0	534.6	277.3	86.0	24.4
82.5°	12.2	12.8	23.3	41.6	107.6	213.0	213.0	234.0	98.2	48.2	10.0
85°	4.4	4.4	12.2	23.8	45.5	71.0	71.5	72.1	51.6	36.0	4.4
87.5°	1.7	1.7	6.1	10.0	16.6	21.6	21.6	17.2	26.1	23.8	1.7
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4	232.4
2.5°	233.5	230.2	227.4	223.5	218.5	215.7	216.3	213.0	213.0	211.3	210.7
5°	233.5	230.2	222.9	216.3	211.9	206.3	203.5	201.3	201.3	200.2	200.8
7.5°	235.1	230.2	220.2	211.3	204.1	198.5	194.1	193.6	192.4	189.7	191.9
10°	245.1	237.9	221.3	209.1	200.8	194.7	186.9	184.7	181.4	176.4	176.9
12.5°	253.5	244.0	229.0	212.4	201.9	191.9	174.1	154.7	146.4	137.5	138.1
15°	265.7	252.3	231.8	216.8	201.9	169.7	137.5	112.6	99.3	92.6	92.6
17.5°	272.3	261.2	239.6	219.6	185.8	138.1	97.6	76.0	73.8	74.9	74.9
20°	286.2	271.2	248.5	221.8	159.2	98.2	71.5	69.3	70.4	72.7	72.1
22.5°	295.0	280.1	255.1	211.9	123.1	70.4	67.1	66.0	67.1	69.9	69.9
25°	302.3	292.8	265.7	187.5	87.1	63.8	62.7	63.8	64.9	66.0	67.7
27.5°	320.0	303.9	272.9	155.8	62.7	59.3	60.5	61.0	61.0	62.7	63.2
30°	331.6	318.9	278.4	120.3	55.5	54.9	56.0	56.6	57.1	58.8	59.3
32.5°	342.7	338.3	271.2	81.5	52.1	51.0	50.5	51.0	53.2	54.9	54.4
35°	358.8	356.1	260.7	56.6	48.8	46.6	45.5	46.0	47.7	49.4	48.8
37.5°	378.2	381.0	235.1	49.4	45.5	42.7	40.5	40.5	41.0	42.7	43.3
40°	401.0	408.2	205.2	46.0	43.3	39.9	37.7	34.9	34.4	33.8	34.4
42.5°	442.6	450.9	171.4	43.8	39.9	36.0	32.7	29.4	26.6	25.0	25.0
45°	500.8	494.1	127.0	41.6	38.3	32.7	27.7	23.8	20.0	18.3	18.3
47.5°	581.2	558.5	87.1	39.4	35.5	28.8	23.3	18.3	15.0	13.3	13.3
50°	692.7	617.8	56.6	37.2	33.8	25.0	18.9	13.3	11.1	10.5	11.1
52.5°	798.1	678.3	44.9	34.4	30.5	21.6	14.4	11.1	10.0	9.4	9.4
55°	895.1	708.8	39.9	31.6	27.7	17.7	12.2	9.4	8.9	8.3	8.3
57.5°	977.2	719.3	34.4	27.7	22.2	13.9	10.0	8.3	7.2	6.7	6.7
60°	1048.2	722.1	26.6	22.2	16.1	10.5	8.3	7.2	6.1	5.0	5.0
62.5°	1104.8	702.7	18.9	15.5	11.1	8.3	7.2	5.0	3.3	2.2	1.7
65°	1149.7	663.9	12.8	10.5	7.2	6.1	4.4	2.2	0.6	0.0	0.0
67.5°	1097.0	575.7	10.0	7.8	5.0	3.9	2.2	0.6	0.0	0.0	0.0
70°	894.6	446.4	7.2	5.0	3.3	1.1	0.6	0.0	0.0	0.0	0.0
72.5°	608.9	287.8	5.5	3.3	1.7	0.6	0.0	0.0	0.0	0.0	0.0
75°	273.4	103.2	3.9	2.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	66.6	24.4	2.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.7	6.1	1.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.7	2.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.6	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

(END OF REPORT)