

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: P677183

Luminaire Tested: **CCW-SA-1B-830-U-SL4-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P677183
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1B-830-U-SL4-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @450mA w/
SL4 distribution lens and House Side Shield
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

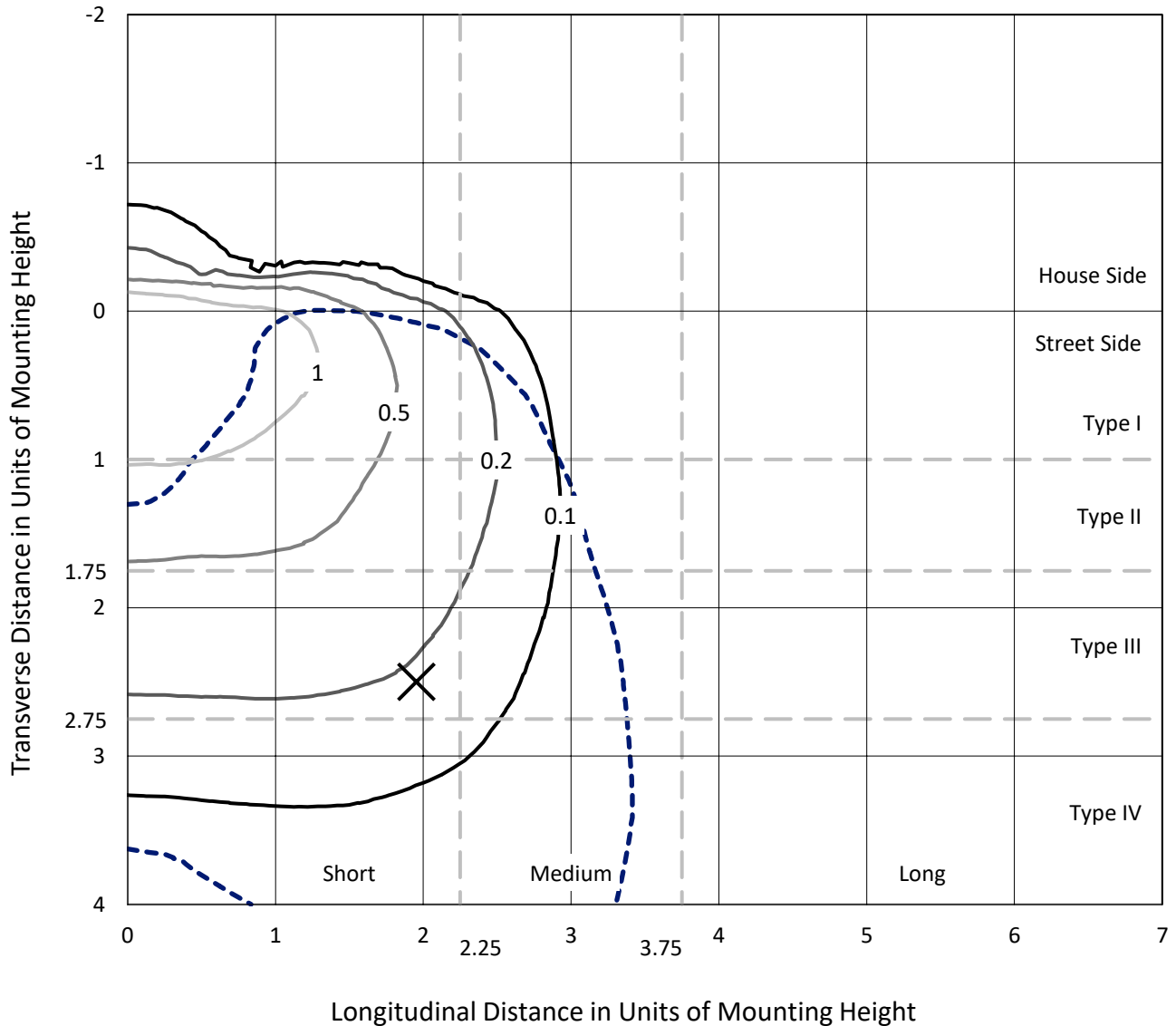
Lumens per Lamp: N/A
Luminaire Lumens: 2266.8 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

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

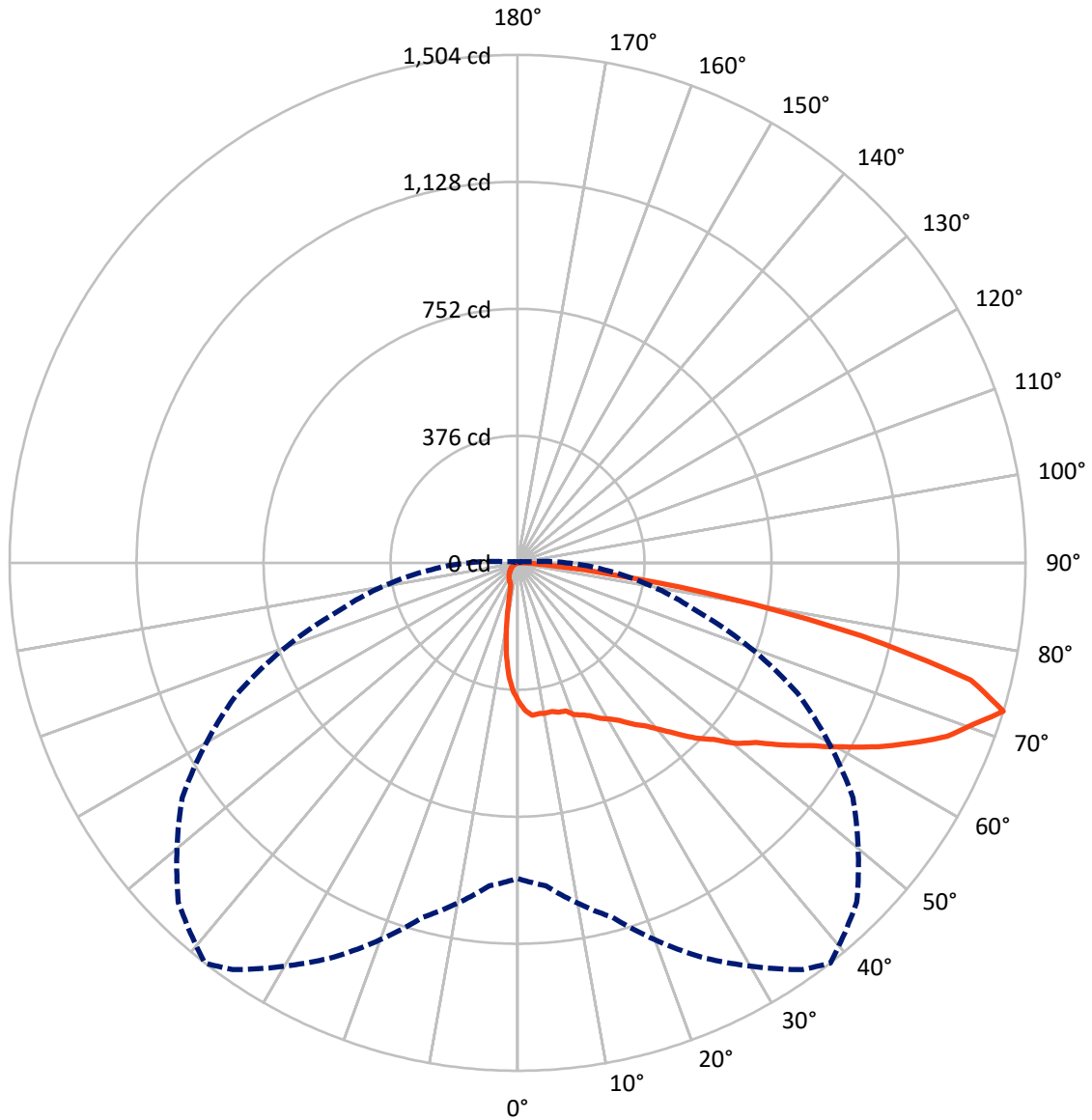
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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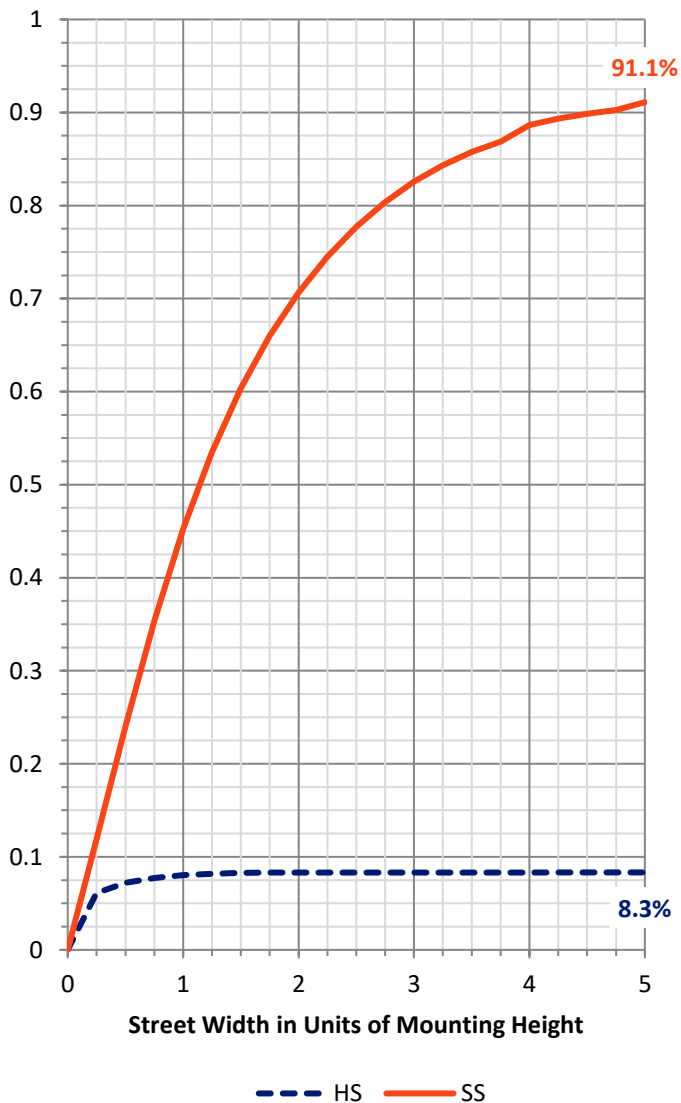
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	189.8	0.0	189.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	2077.0	0.0	2077.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	2266.8	0.0	2266.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	1.6
10°-20°	87.8	3.9
20°-30°	140.8	6.2
30°-40°	212.6	9.4
40°-50°	323.6	14.3
50°-60°	455.6	20.1
60°-70°	556.5	24.6
70°-80°	404.1	17.8
80°-90°	49.8	2.2
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°	2266.8	100.0
0°-180°	2266.8	100.0

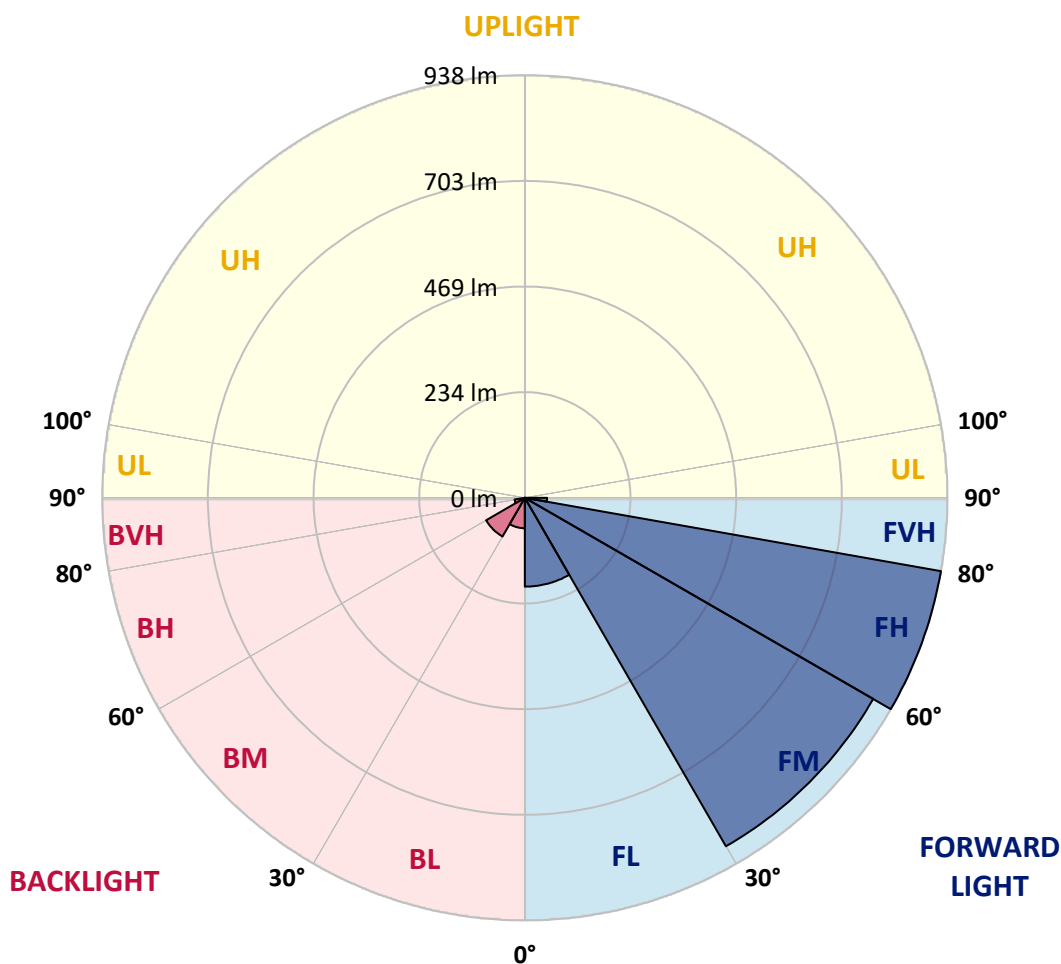


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	197.2	8.7			
FM (30°-60°)	892.7	39.4			
FH (60°-80°)	937.6	41.4			G1/1800
FVH (80°-90°)	49.5	2.2			G1/100
BL (0°-30°)	67.4	3.0	B0/110		
BM (30°-60°)	99.2	4.4	B0/220		
BH (60°-80°)	23.0	1.0	B0/110		G0/110
BVH (80°-90°)	0.3	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
2.5°	450.3	450.3	454.6	450.3	448.7	438.6	439.2	433.9	428.5	421.1	414.2
5°	455.7	459.4	462.0	458.3	452.5	453.5	457.2	447.1	432.8	423.8	408.3
7.5°	453.5	461.5	459.4	457.2	453.5	450.9	445.6	441.3	434.4	425.9	407.8
10°	451.9	454.6	455.1	453.5	445.6	453.0	447.1	440.2	431.7	421.6	399.3
12.5°	446.1	446.1	450.9	447.1	448.2	451.9	449.3	447.7	438.6	430.1	410.5
15°	439.7	441.8	449.3	455.1	460.4	458.8	457.2	452.5	444.5	434.9	414.2
17.5°	441.3	442.4	454.1	464.7	462.0	461.0	469.5	459.4	451.4	440.8	417.4
20°	447.1	450.3	463.6	477.5	480.1	480.1	476.9	471.1	459.9	445.6	423.2
22.5°	453.0	454.1	475.9	493.4	496.1	489.1	491.8	474.8	464.2	456.2	429.1
25°	475.3	473.2	496.6	510.4	508.8	501.9	499.3	484.4	480.1	465.8	441.8
27.5°	505.6	496.6	519.5	528.0	519.5	521.6	514.1	498.2	489.1	480.6	447.7
30°	524.2	529.6	541.8	550.3	535.9	536.5	532.7	515.2	501.4	503.5	467.3
32.5°	553.0	556.7	565.7	569.4	558.3	557.2	553.5	539.7	529.6	527.4	493.9
35°	583.8	590.7	591.2	592.3	582.2	586.4	581.1	561.5	566.8	570.5	525.8
37.5°	614.1	607.7	618.3	623.1	612.0	612.0	613.6	600.3	609.8	621.0	571.0
40°	625.8	628.4	647.1	643.3	656.6	648.7	654.5	651.3	659.3	684.8	634.8
42.5°	638.0	641.2	666.2	673.1	689.1	691.7	700.2	700.8	724.2	766.2	696.0
45°	661.4	656.1	690.1	707.1	733.2	740.6	750.7	759.2	795.9	845.4	765.6
47.5°	682.7	675.2	714.1	748.1	780.0	781.6	809.2	818.3	861.9	918.2	834.7
50°	712.5	715.1	731.6	790.1	822.5	841.1	860.3	890.0	938.4	998.5	884.7
52.5°	743.3	740.6	768.3	825.7	876.7	883.7	926.7	960.2	1012.9	1058.0	907.1
55°	781.0	784.2	794.9	870.4	935.2	951.7	1000.1	1035.2	1092.6	1083.6	914.5
57.5°	818.8	815.6	839.5	920.3	1008.6	1020.8	1085.2	1105.9	1144.7	1100.6	895.9
60°	856.0	861.9	872.0	976.7	1088.9	1107.0	1158.0	1168.6	1177.1	1108.6	881.5
62.5°	898.5	884.7	916.1	1036.3	1161.2	1198.9	1239.4	1197.4	1189.9	1094.2	848.6
65°	919.8	924.1	965.0	1104.3	1257.4	1285.1	1290.4	1236.2	1197.9	1062.3	817.7
67.5°	952.8	958.6	1010.7	1174.0	1356.3	1371.7	1352.6	1271.3	1191.0	1020.8	706.6
70°	957.0	971.4	1071.9	1246.8	1418.5	1431.8	1416.9	1294.6	1135.1	857.6	523.2
72.5°	934.7	960.2	1086.8	1288.3	1470.6	1504.1	1420.7	1212.2	915.0	547.1	268.0
75°	706.1	727.3	994.8	1226.6	1378.1	1386.1	1247.3	925.1	521.0	186.6	68.6
77.5°	365.8	402.5	664.1	937.4	1050.1	1041.6	868.2	545.0	179.2	48.9	27.6
80°	210.0	219.1	290.3	526.4	660.4	627.9	480.1	235.0	78.7	24.5	18.1
82.5°	103.7	116.4	156.3	235.5	330.2	271.7	180.2	140.9	44.1	13.3	16.0
85°	22.3	23.4	79.8	112.7	134.0	88.3	61.7	118.6	16.0	8.0	15.4
87.5°	16.0	15.4	22.3	50.5	37.2	22.9	36.7	62.2	3.7	3.7	3.2
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°	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9	409.9
2.5°	409.9	405.1	399.8	389.7	387.1	385.5	376.4	375.9	374.3	370.6	369.0
5°	398.8	390.8	380.7	370.1	361.5	346.1	327.5	317.9	306.2	306.8	303.1
7.5°	397.2	382.3	367.9	345.6	318.5	289.8	261.1	242.4	229.2	221.2	222.8
10°	389.7	378.6	355.2	313.7	270.1	226.5	189.8	162.2	146.2	134.0	137.7
12.5°	392.9	371.1	338.2	282.9	220.6	166.9	121.2	94.6	82.9	78.7	79.8
15°	390.8	371.1	328.0	249.4	173.3	113.2	78.7	70.2	68.1	68.1	67.0
17.5°	397.2	375.4	311.0	216.4	124.4	75.5	67.5	65.9	64.3	64.3	64.3
20°	406.2	377.5	299.3	179.7	87.7	66.5	63.3	62.2	61.7	61.7	61.1
22.5°	406.7	375.4	277.5	139.3	67.5	62.7	60.1	59.5	59.5	58.5	58.5
25°	409.9	377.5	254.1	104.7	62.7	59.0	56.9	56.4	56.9	56.4	55.8
27.5°	417.9	381.2	230.8	76.6	59.0	55.8	54.2	53.7	53.7	53.7	52.6
30°	428.0	381.2	204.7	63.3	55.8	52.6	51.0	50.5	50.0	50.0	50.0
32.5°	449.3	393.4	172.8	56.4	51.6	48.9	47.3	47.3	46.8	46.8	46.3
35°	475.9	402.0	140.4	52.1	47.9	45.2	43.6	43.6	43.1	43.1	42.5
37.5°	508.8	423.2	107.4	48.9	44.1	41.5	39.9	39.9	39.9	39.3	39.3
40°	555.6	445.0	79.8	44.7	40.4	37.7	36.7	36.2	35.6	35.6	34.6
42.5°	605.6	478.5	59.5	41.5	37.2	35.1	33.5	31.9	31.9	30.3	30.3
45°	659.8	507.8	48.4	37.7	34.0	31.4	29.8	28.7	27.1	26.1	26.1
47.5°	713.0	525.8	42.5	33.5	30.8	28.7	27.1	25.0	22.9	22.3	21.8
50°	756.1	531.2	37.7	30.3	28.2	26.1	23.9	21.3	19.1	18.1	17.5
52.5°	756.1	501.9	34.0	27.1	25.5	23.4	20.7	17.5	14.9	13.8	13.3
55°	756.1	455.7	30.3	25.0	22.9	21.3	17.5	14.4	11.7	10.1	9.6
57.5°	744.9	399.8	27.1	22.3	20.2	18.1	14.9	11.2	8.5	6.9	6.9
60°	714.1	341.3	23.4	19.7	17.5	14.9	11.7	8.0	5.3	3.7	3.7
62.5°	674.7	271.7	20.2	16.5	14.4	12.2	9.0	5.3	2.1	1.1	1.1
65°	606.1	200.4	17.5	13.8	11.2	9.0	5.8	2.1	0.0	0.0	0.0
67.5°	500.3	134.0	13.8	11.2	9.6	6.4	3.7	0.5	0.0	0.0	0.0
70°	352.0	76.0	10.6	8.0	6.9	4.3	1.1	0.0	0.0	0.0	0.0
72.5°	144.6	33.5	7.4	5.8	4.8	2.1	0.0	0.0	0.0	0.0	0.0
75°	39.3	14.9	4.8	3.2	2.7	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	22.9	10.1	2.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.1	4.8	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.1	2.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	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

(END OF REPORT)