

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: P677160

Luminaire Tested: **CCW-SA-1A-760-U-SL4-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P677160  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1A-760-U-SL4-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
SL4 distribution lens and House Side Shield  
Light Source: (16) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

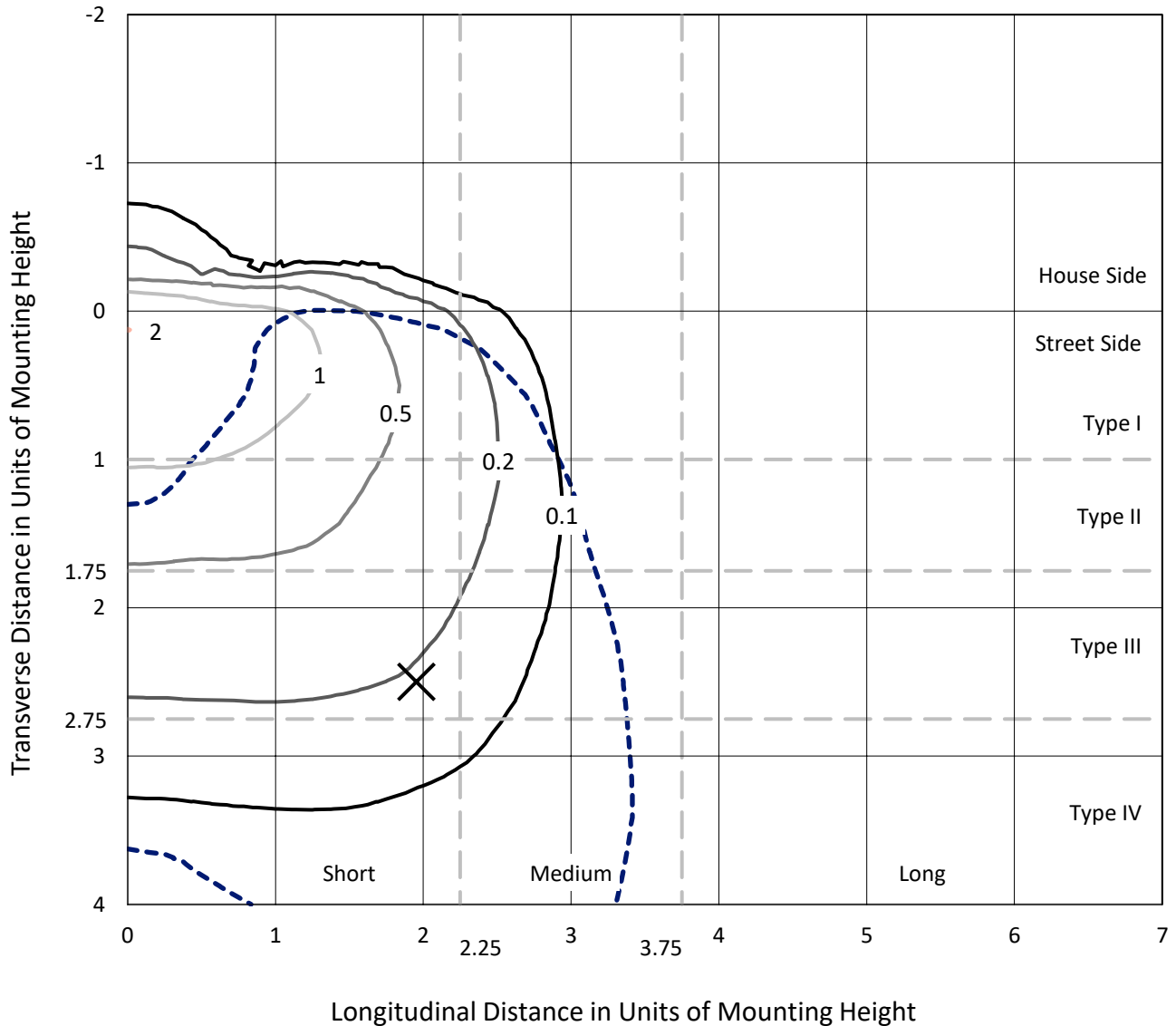
Lumens per Lamp: N/A  
Luminaire Lumens: 2311.6 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 18  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

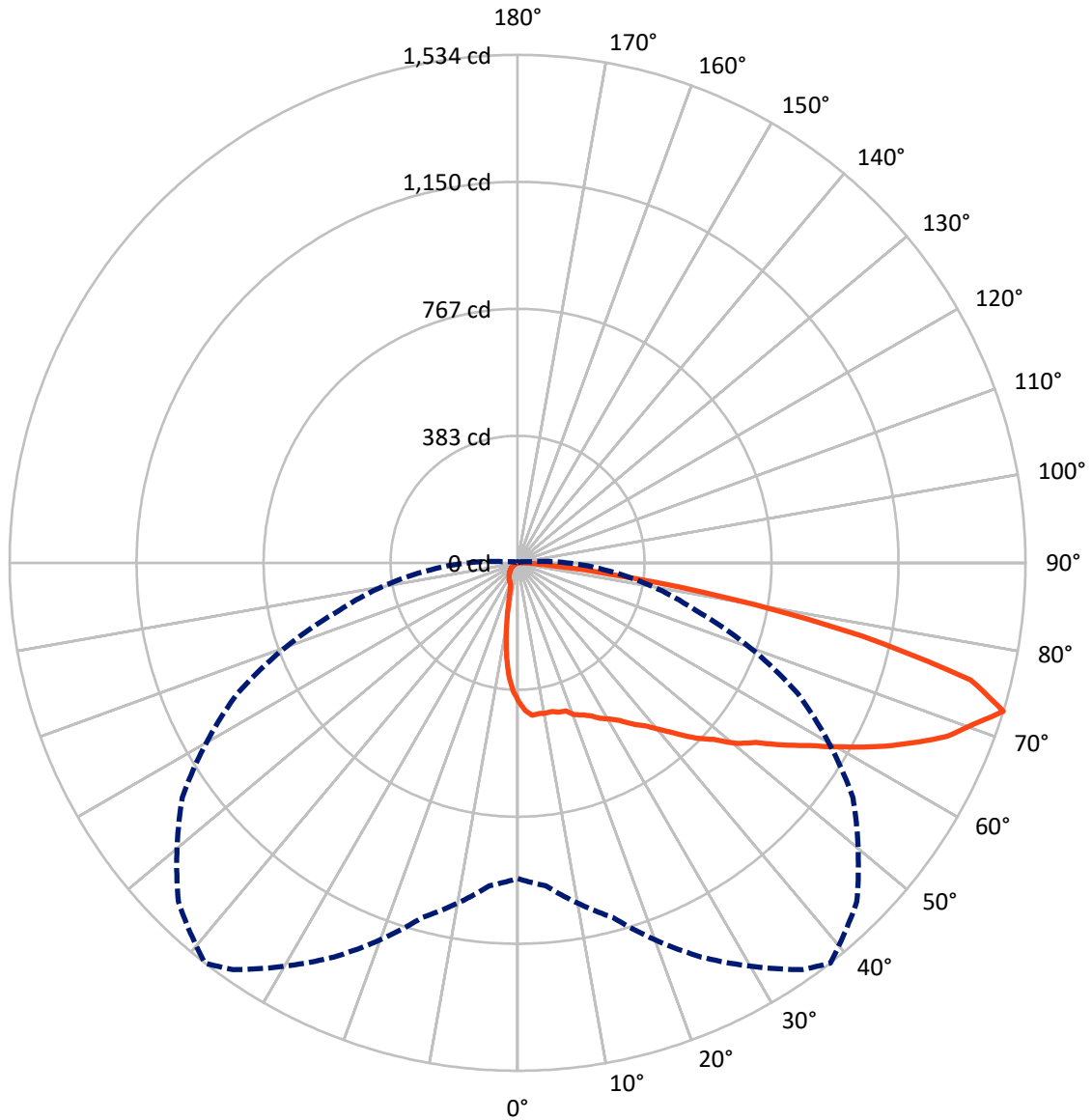
× Max cd  
 - - - 1/2 Max cd



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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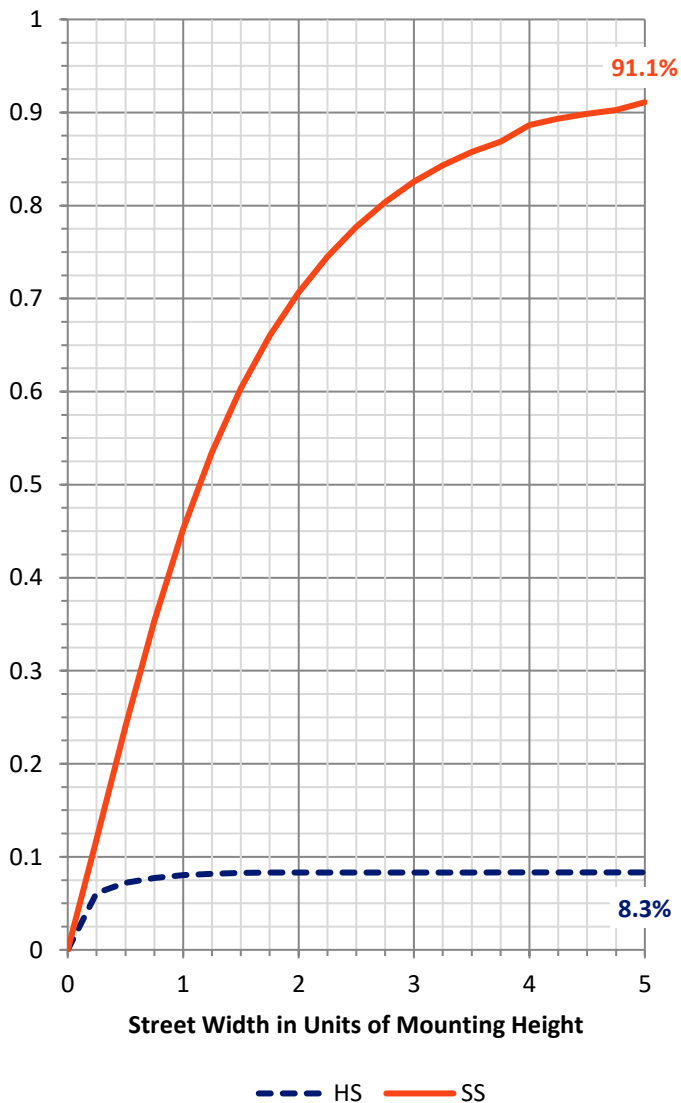
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	193.6	0.0	193.6
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	2118.0	0.0	2118.0
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	2311.6	0.0	2311.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.6	1.6
10°-20°	89.6	3.9
20°-30°	143.6	6.2
30°-40°	216.8	9.4
40°-50°	330.0	14.3
50°-60°	464.6	20.1
60°-70°	567.5	24.6
70°-80°	412.1	17.8
80°-90°	50.8	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°	2311.6	100.0
0°-180°	2311.6	100.0

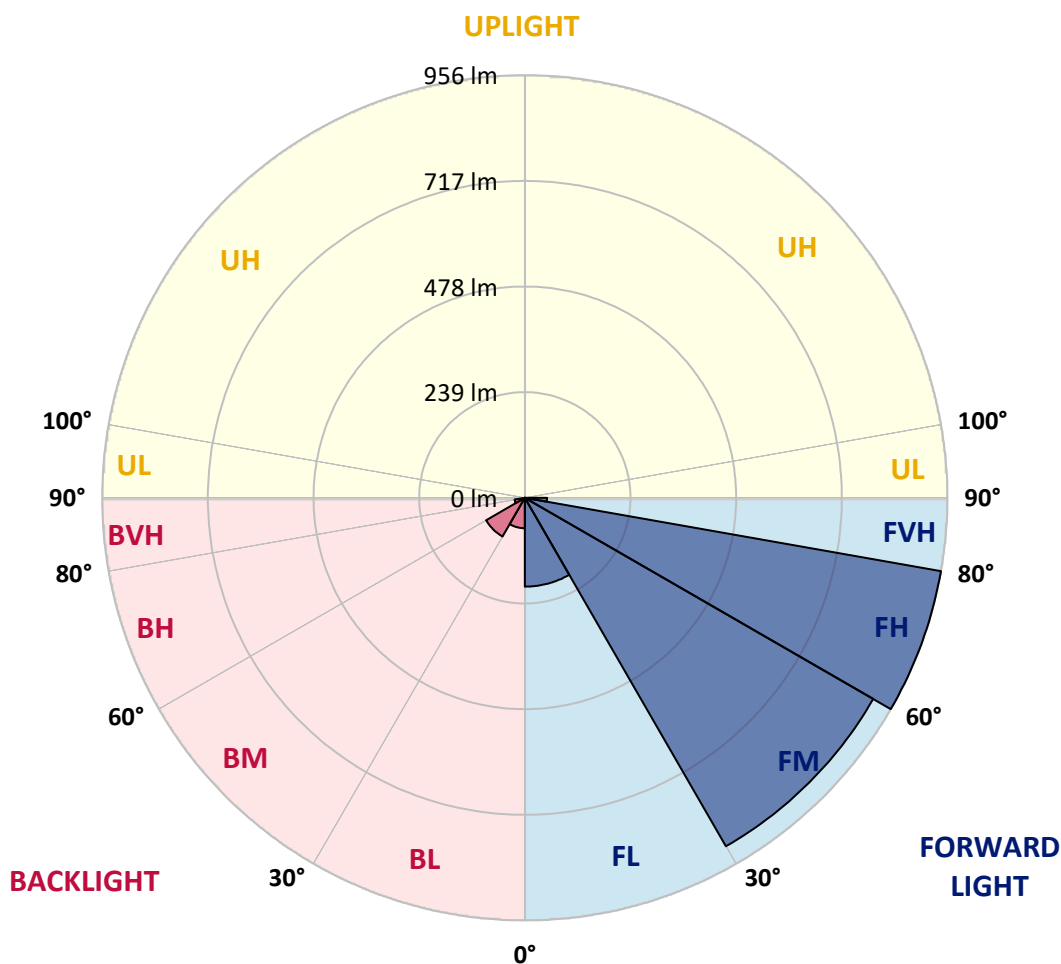


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	201.1	8.7			
FM (30°-60°)	910.3	39.4			
FH (60°-80°)	956.1	41.4			G1/1800
FVH (80°-90°)	50.5	2.2			G1/100
BL (0°-30°)	68.7	3.0	B0/110		
BM (30°-60°)	101.1	4.4	B0/220		
BH (60°-80°)	23.5	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°	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0
2.5°	459.2	459.2	463.6	459.2	457.6	447.3	447.8	442.4	437.0	429.4	422.4
5°	464.7	468.5	471.2	467.4	461.4	462.5	466.3	456.0	441.3	432.1	416.4
7.5°	462.5	470.6	468.5	466.3	462.5	459.8	454.4	450.0	443.0	434.3	415.9
10°	460.9	463.6	464.1	462.5	454.4	461.9	456.0	448.9	440.3	430.0	407.2
12.5°	454.9	454.9	459.8	456.0	457.1	460.9	458.2	456.5	447.3	438.6	418.6
15°	448.4	450.6	458.2	464.1	469.5	467.9	466.3	461.4	453.3	443.5	422.4
17.5°	450.0	451.1	463.0	473.9	471.2	470.1	478.8	468.5	460.3	449.5	425.6
20°	456.0	459.2	472.8	486.9	489.6	489.6	486.3	480.4	469.0	454.4	431.6
22.5°	461.9	463.0	485.3	503.2	505.9	498.8	501.5	484.2	473.3	465.2	437.5
25°	484.7	482.5	506.4	520.5	518.9	511.8	509.1	493.9	489.6	475.0	450.6
27.5°	515.6	506.4	529.7	538.4	529.7	531.9	524.3	508.0	498.8	490.1	456.5
30°	534.6	540.0	552.5	561.2	546.5	547.1	543.3	525.4	511.3	513.5	476.6
32.5°	563.9	567.7	576.9	580.7	569.3	568.2	564.4	550.3	540.0	537.9	503.7
35°	595.3	602.4	602.9	604.0	593.7	598.0	592.6	572.6	578.0	581.8	536.2
37.5°	626.2	619.7	630.6	635.4	624.1	624.1	625.7	612.1	621.9	633.3	582.3
40°	638.2	640.9	659.8	656.1	669.6	661.5	667.4	664.2	672.3	698.3	647.4
42.5°	650.6	653.9	679.4	686.4	702.7	705.4	714.1	714.6	738.5	781.3	709.7
45°	674.5	669.1	703.8	721.1	747.7	755.3	765.6	774.2	811.7	862.1	780.8
47.5°	696.2	688.6	728.2	762.9	795.4	797.0	825.2	834.4	878.9	936.4	851.2
50°	726.5	729.2	746.1	805.7	838.8	857.7	877.3	907.6	957.0	1018.2	902.2
52.5°	758.0	755.3	783.5	842.0	894.1	901.1	945.0	979.2	1032.9	1079.0	925.0
55°	796.5	799.7	810.6	887.6	953.7	970.5	1019.9	1055.6	1114.2	1105.0	932.6
57.5°	835.0	831.7	856.1	938.5	1028.5	1041.0	1106.6	1127.8	1167.3	1122.3	913.6
60°	872.9	878.9	889.2	996.0	1110.4	1128.8	1180.9	1191.7	1200.4	1130.5	899.0
62.5°	916.3	902.2	934.2	1056.7	1184.1	1222.6	1263.8	1221.0	1213.4	1115.8	865.3
65°	938.0	942.3	984.1	1126.1	1282.3	1310.5	1315.9	1260.6	1221.6	1083.3	833.9
67.5°	971.6	977.6	1030.7	1197.2	1383.1	1398.9	1379.3	1296.4	1214.5	1041.0	720.6
70°	975.9	990.6	1093.1	1271.4	1446.6	1460.1	1444.9	1320.2	1157.6	874.6	533.5
72.5°	953.2	979.2	1108.2	1313.7	1499.7	1533.9	1448.7	1236.2	933.1	557.9	273.3
75°	720.0	741.7	1014.4	1250.8	1405.4	1413.5	1272.0	943.4	531.3	190.3	69.9
77.5°	373.0	410.4	677.2	955.9	1070.8	1062.2	885.4	555.7	182.7	49.9	28.2
80°	214.2	223.4	296.0	536.8	673.4	640.3	489.6	239.6	80.2	24.9	18.4
82.5°	105.7	118.7	159.4	240.2	336.7	277.1	183.8	143.7	45.0	13.6	16.3
85°	22.8	23.9	81.3	114.9	136.6	90.0	62.9	120.9	16.3	8.1	15.7
87.5°	16.3	15.7	22.8	51.5	38.0	23.3	37.4	63.4	3.8	3.8	3.3
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°	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0	418.0
2.5°	418.0	413.1	407.7	397.4	394.7	393.1	383.9	383.3	381.7	377.9	376.3
5°	406.6	398.5	388.2	377.4	368.7	353.0	334.0	324.2	312.3	312.8	309.0
7.5°	405.0	389.8	375.2	352.4	324.8	295.5	266.2	247.2	233.7	225.6	227.2
10°	397.4	386.0	362.2	319.9	275.4	231.0	193.6	165.4	149.1	136.6	140.4
12.5°	400.7	378.4	344.8	288.4	225.0	170.2	123.6	96.5	84.6	80.2	81.3
15°	398.5	378.4	334.5	254.3	176.8	115.5	80.2	71.6	69.4	69.4	68.3
17.5°	405.0	382.8	317.2	220.7	126.9	77.0	68.9	67.2	65.6	65.6	65.6
20°	414.2	385.0	305.3	183.3	89.5	67.8	64.5	63.4	62.9	62.9	62.4
22.5°	414.8	382.8	283.0	142.1	68.9	64.0	61.3	60.7	60.7	59.6	59.6
25°	418.0	385.0	259.2	106.8	64.0	60.2	58.0	57.5	58.0	57.5	56.9
27.5°	426.2	388.8	235.3	78.1	60.2	56.9	55.3	54.8	54.8	54.8	53.7
30°	436.5	388.8	208.7	64.5	56.9	53.7	52.1	51.5	51.0	51.0	51.0
32.5°	458.2	401.2	176.2	57.5	52.6	49.9	48.3	48.3	47.7	47.7	47.2
35°	485.3	409.9	143.1	53.1	48.8	46.1	44.5	44.5	43.9	43.9	43.4
37.5°	518.9	431.6	109.5	49.9	45.0	42.3	40.7	40.7	40.7	40.1	40.1
40°	566.6	453.8	81.3	45.5	41.2	38.5	37.4	36.9	36.3	36.3	35.2
42.5°	617.6	488.0	60.7	42.3	38.0	35.8	34.2	32.5	32.5	30.9	30.9
45°	672.9	517.8	49.3	38.5	34.7	32.0	30.4	29.3	27.7	26.6	26.6
47.5°	727.1	536.2	43.4	34.2	31.4	29.3	27.7	25.5	23.3	22.8	22.2
50°	771.0	541.6	38.5	30.9	28.7	26.6	24.4	21.7	19.5	18.4	17.9
52.5°	771.0	511.8	34.7	27.7	26.0	23.9	21.1	17.9	15.2	14.1	13.6
55°	771.0	464.7	30.9	25.5	23.3	21.7	17.9	14.6	11.9	10.3	9.8
57.5°	759.6	407.7	27.7	22.8	20.6	18.4	15.2	11.4	8.7	7.0	7.0
60°	728.2	348.1	23.9	20.1	17.9	15.2	11.9	8.1	5.4	3.8	3.8
62.5°	688.0	277.1	20.6	16.8	14.6	12.5	9.2	5.4	2.2	1.1	1.1
65°	618.1	204.4	17.9	14.1	11.4	9.2	6.0	2.2	0.0	0.0	0.0
67.5°	510.2	136.6	14.1	11.4	9.8	6.5	3.8	0.5	0.0	0.0	0.0
70°	358.9	77.5	10.8	8.1	7.0	4.3	1.1	0.0	0.0	0.0	0.0
72.5°	147.5	34.2	7.6	6.0	4.9	2.2	0.0	0.0	0.0	0.0	0.0
75°	40.1	15.2	4.9	3.3	2.7	0.5	0.0	0.0	0.0	0.0	0.0
77.5°	23.3	10.3	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.4	4.9	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.4	2.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	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)