

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: P676783

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

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676783  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1A-850-U-T4W-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
T4W distribution lens and House Side Shield  
Light Source: (16) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

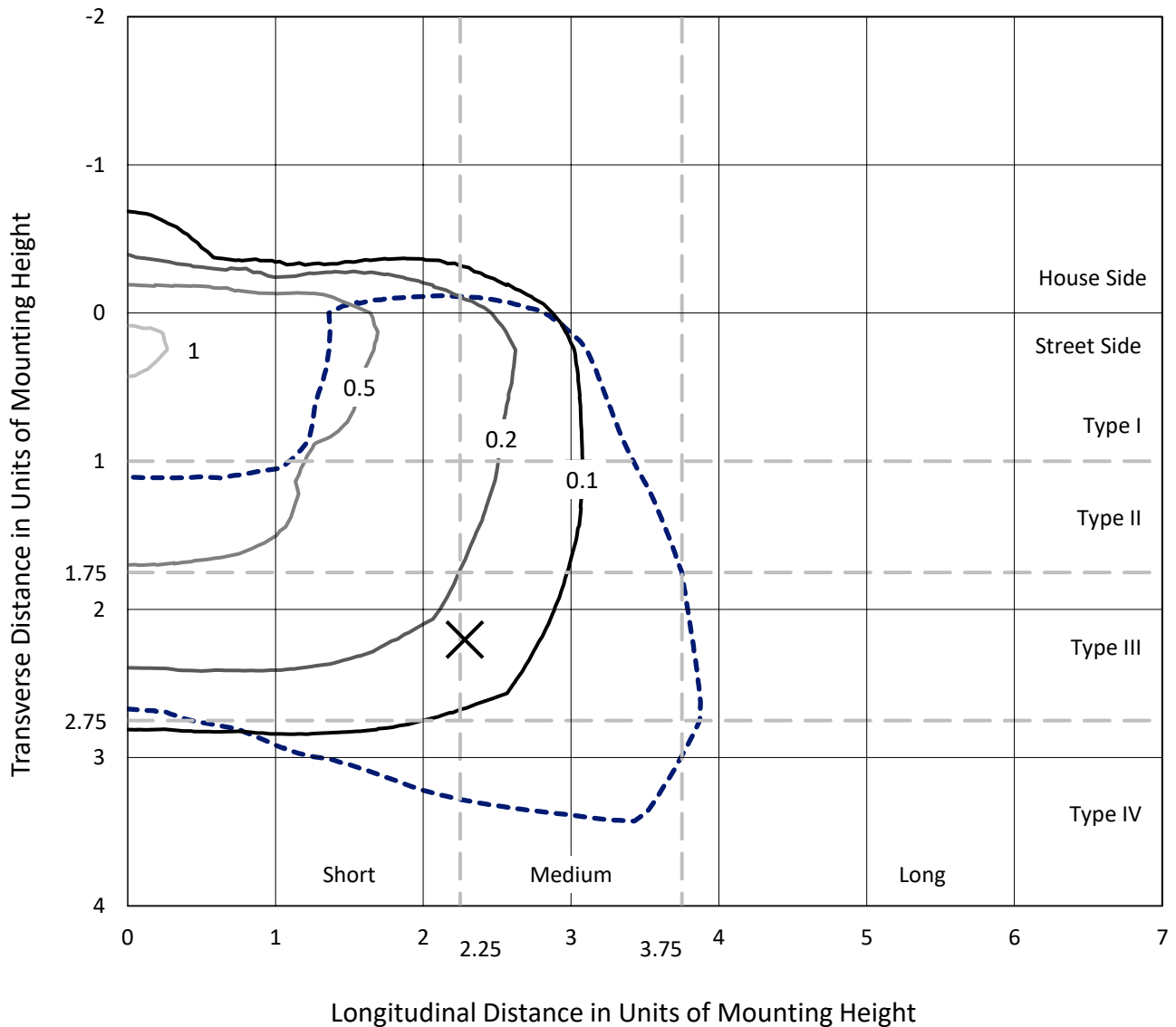
Lumens per Lamp: N/A  
Luminaire Lumens: 1722.4 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B0 - U0 - G1

Input Watts (W): 18  
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

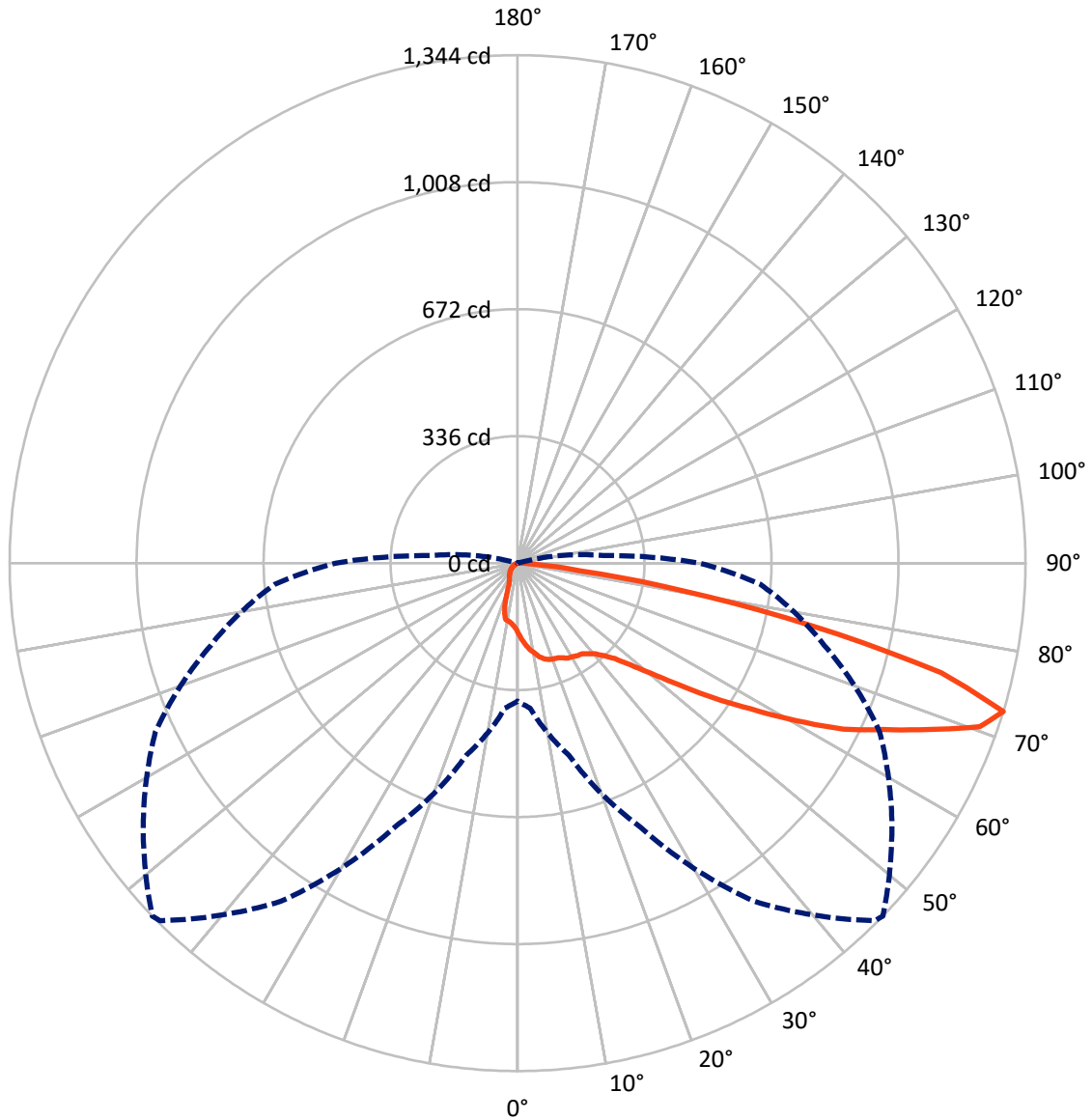
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.2 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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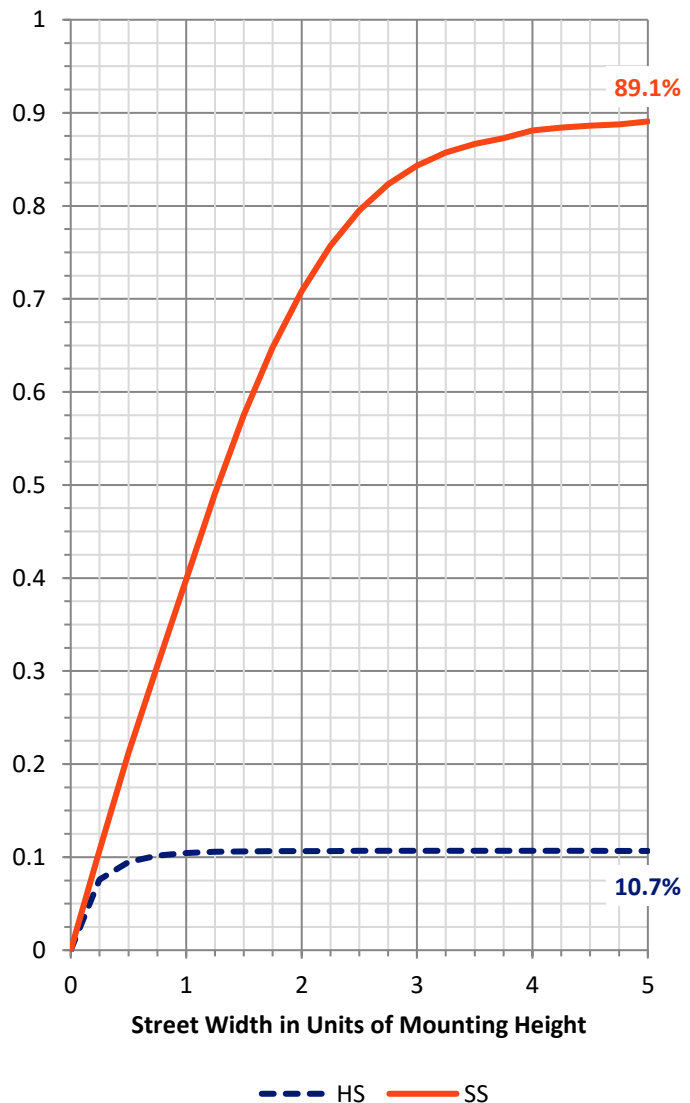
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	185.4	0.0	185.4
	% Fixture	10.8	0.0	10.8
<b>Street Side</b>	Lumens	1536.9	0.0	1536.9
	% Fixture	89.2	0.0	89.2
<b>Total</b>	Lumens	1722.4	0.0	1722.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.4	1.1
10°-20°	55.6	3.2
20°-30°	87.1	5.1
30°-40°	122.0	7.1
40°-50°	201.1	11.7
50°-60°	361.4	21.0
60°-70°	523.9	30.4
70°-80°	326.9	19.0
80°-90°	25.9	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°	1722.4	100.0
0°-180°	1722.4	100.0



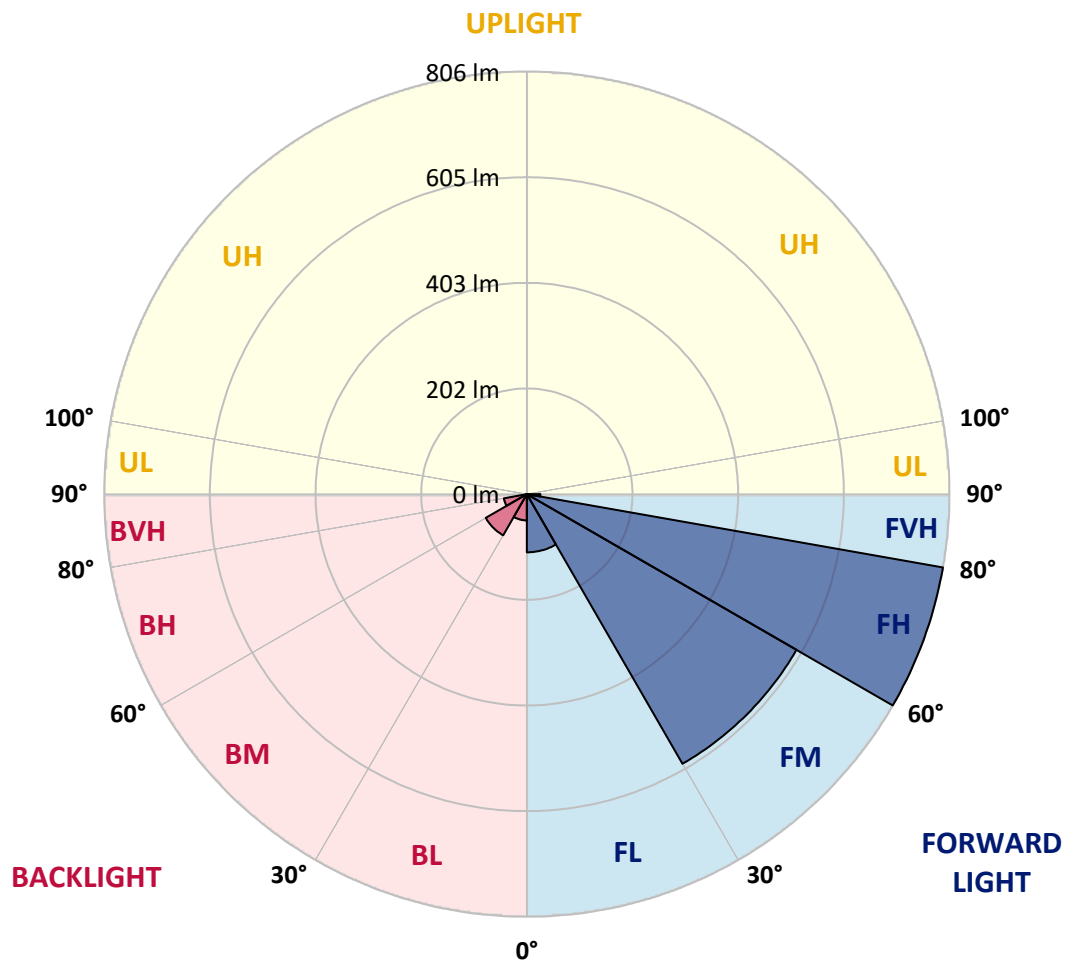
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	111.0	6.4			
FM (30°-60°)	593.9	34.5			
FH (60°-80°)	806.2	46.8			G1/1800
FVH (80°-90°)	25.8	1.5			G1/100
BL (0°-30°)	50.1	2.9	B0/110		
BM (30°-60°)	90.6	5.3	B0/220		
BH (60°-80°)	44.6	2.6	B0/110		G0/110
BVH (80°-90°)	0.1	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°	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1
2.5°	206.0	205.2	206.5	206.0	200.8	201.7	201.2	197.7	191.5	188.0	185.8
5°	229.8	232.0	230.2	226.3	223.2	217.0	216.2	210.4	200.8	194.6	188.0
7.5°	254.4	254.4	250.9	244.7	238.1	231.5	230.6	221.0	212.6	202.1	192.9
10°	272.8	270.6	268.0	261.4	253.9	245.1	240.8	233.7	224.5	211.8	199.9
12.5°	289.1	285.6	281.2	271.5	262.7	253.1	253.9	242.5	236.4	224.9	207.4
15°	298.3	295.2	291.3	282.5	268.9	264.5	262.7	255.7	244.7	233.3	216.6
17.5°	300.5	298.3	293.0	281.6	274.1	268.9	268.4	260.1	255.3	245.6	227.1
20°	296.1	292.2	288.2	280.7	273.7	271.9	270.6	270.6	264.5	251.7	233.7
22.5°	288.6	284.2	282.1	277.7	271.9	271.5	272.4	271.5	266.7	258.3	240.8
25°	282.9	280.7	277.2	275.9	272.4	279.0	277.7	276.3	275.0	265.4	251.7
27.5°	284.7	284.2	281.6	276.3	273.7	280.7	284.7	285.1	284.7	275.0	261.8
30°	285.6	283.4	280.7	279.4	280.3	287.3	287.3	297.0	293.0	283.4	271.9
32.5°	295.7	294.4	285.6	282.5	282.9	291.3	291.7	301.4	300.1	293.5	280.7
35°	317.2	308.4	295.7	286.9	286.9	297.9	294.4	308.4	311.9	301.4	286.9
37.5°	349.3	342.7	319.8	300.1	292.6	300.5	304.0	311.9	322.5	313.2	299.2
40°	413.0	411.7	379.1	336.5	307.1	314.1	315.4	327.7	334.8	322.0	318.1
42.5°	506.1	499.5	469.2	402.0	333.5	330.4	335.2	343.1	359.8	349.3	339.6
45°	597.0	594.0	563.7	488.5	381.3	362.9	360.3	374.3	398.9	387.5	380.0
47.5°	662.9	656.8	639.7	576.4	451.6	401.1	402.9	416.9	448.1	439.3	441.5
50°	713.5	710.4	692.4	657.7	540.4	461.3	457.8	471.8	514.0	519.7	525.9
52.5°	768.8	774.5	750.4	720.9	645.4	542.1	534.2	539.1	593.5	606.7	623.8
55°	822.0	831.2	807.0	803.1	755.2	631.8	630.4	619.0	689.3	691.1	700.3
57.5°	856.7	853.6	851.9	873.4	865.0	734.6	728.0	716.5	780.3	768.8	796.5
60°	859.3	868.1	897.6	950.7	965.6	855.4	845.7	814.5	858.9	831.7	884.4
62.5°	879.1	886.1	940.6	1014.0	1033.3	961.7	968.3	889.2	926.1	904.6	981.9
65°	829.0	851.0	960.4	1063.2	1122.0	1069.3	1062.7	985.4	995.1	974.9	1078.1
67.5°	783.8	792.1	906.3	1078.1	1192.3	1177.4	1174.8	1070.6	1066.3	1028.9	1105.4
70°	637.0	647.1	760.0	1001.7	1216.1	1303.5	1297.3	1190.1	1114.6	999.5	965.6
72.5°	365.1	385.3	526.8	771.5	1092.6	1338.6	1344.4	1209.5	1057.5	840.4	644.9
75°	119.5	125.2	218.8	437.1	817.2	1167.7	1157.6	1039.5	853.2	554.9	291.3
77.5°	40.4	41.3	64.6	158.2	452.9	789.0	794.7	742.9	524.1	230.6	80.4
80°	20.6	22.0	31.6	59.3	186.3	429.7	438.9	423.5	219.7	68.1	19.3
82.5°	9.7	10.1	18.5	32.9	85.2	168.7	168.7	185.4	77.8	38.2	7.9
85°	3.5	3.5	9.7	18.9	36.0	56.2	56.7	57.1	40.9	28.6	3.5
87.5°	1.3	1.3	4.8	7.9	13.2	17.1	17.1	13.6	20.6	18.9	1.3
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°	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1	184.1
2.5°	185.0	182.3	180.1	177.1	173.1	170.9	171.3	168.7	168.7	167.4	166.9
5°	185.0	182.3	176.6	171.3	167.8	163.4	161.2	159.5	159.5	158.6	159.0
7.5°	186.3	182.3	174.4	167.4	161.7	157.3	153.8	153.3	152.4	150.3	152.0
10°	194.2	188.5	175.3	165.6	159.0	154.2	148.1	146.3	143.7	139.7	140.1
12.5°	200.8	193.3	181.4	168.3	159.9	152.0	137.9	122.6	116.0	109.0	109.4
15°	210.4	199.9	183.6	171.8	159.9	134.4	109.0	89.2	78.6	73.4	73.4
17.5°	215.7	206.9	189.8	174.0	147.2	109.4	77.3	60.2	58.4	59.3	59.3
20°	226.7	214.8	196.8	175.7	126.1	77.8	56.7	54.9	55.8	57.6	57.1
22.5°	233.7	221.9	202.1	167.8	97.5	55.8	53.2	52.3	53.2	55.4	55.4
25°	239.4	232.0	210.4	148.5	69.0	50.5	49.6	50.5	51.4	52.3	53.6
27.5°	253.5	240.8	216.2	123.5	49.6	47.0	47.9	48.3	48.3	49.6	50.1
30°	262.7	252.6	220.5	95.3	43.9	43.5	44.4	44.8	45.3	46.6	47.0
32.5°	271.5	268.0	214.8	64.6	41.3	40.4	40.0	40.4	42.2	43.5	43.1
35°	284.2	282.1	206.5	44.8	38.7	36.9	36.0	36.5	37.8	39.1	38.7
37.5°	299.6	301.8	186.3	39.1	36.0	33.8	32.1	32.1	32.5	33.8	34.3
40°	317.6	323.3	162.6	36.5	34.3	31.6	29.9	27.7	27.2	26.8	27.2
42.5°	350.6	357.2	135.8	34.7	31.6	28.6	25.9	23.3	21.1	19.8	19.8
45°	396.7	391.4	100.6	32.9	30.3	25.9	22.0	18.9	15.8	14.5	14.5
47.5°	460.4	442.4	69.0	31.2	28.1	22.8	18.5	14.5	11.9	10.5	10.5
50°	548.7	489.4	44.8	29.4	26.8	19.8	14.9	10.5	8.8	8.3	8.8
52.5°	632.2	537.3	35.6	27.2	24.2	17.1	11.4	8.8	7.9	7.5	7.5
55°	709.1	561.5	31.6	25.0	22.0	14.1	9.7	7.5	7.0	6.6	6.6
57.5°	774.1	569.8	27.2	22.0	17.6	11.0	7.9	6.6	5.7	5.3	5.3
60°	830.3	572.0	21.1	17.6	12.7	8.3	6.6	5.7	4.8	4.0	4.0
62.5°	875.1	556.6	14.9	12.3	8.8	6.6	5.7	4.0	2.6	1.8	1.3
65°	910.7	525.9	10.1	8.3	5.7	4.8	3.5	1.8	0.4	0.0	0.0
67.5°	869.0	456.0	7.9	6.2	4.0	3.1	1.8	0.4	0.0	0.0	0.0
70°	708.6	353.7	5.7	4.0	2.6	0.9	0.4	0.0	0.0	0.0	0.0
72.5°	482.4	228.0	4.4	2.6	1.3	0.4	0.0	0.0	0.0	0.0	0.0
75°	216.6	81.7	3.1	1.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	52.7	19.3	2.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	14.1	4.8	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.3	1.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.4	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)