

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: P400919

Luminaire Tested: **ENV-SA1A-730-U-T2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400919  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1A-730-U-T2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1884 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B0 - U0 - G0

Input Watts (W): 20.1  
Input Voltage (V): NR  
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

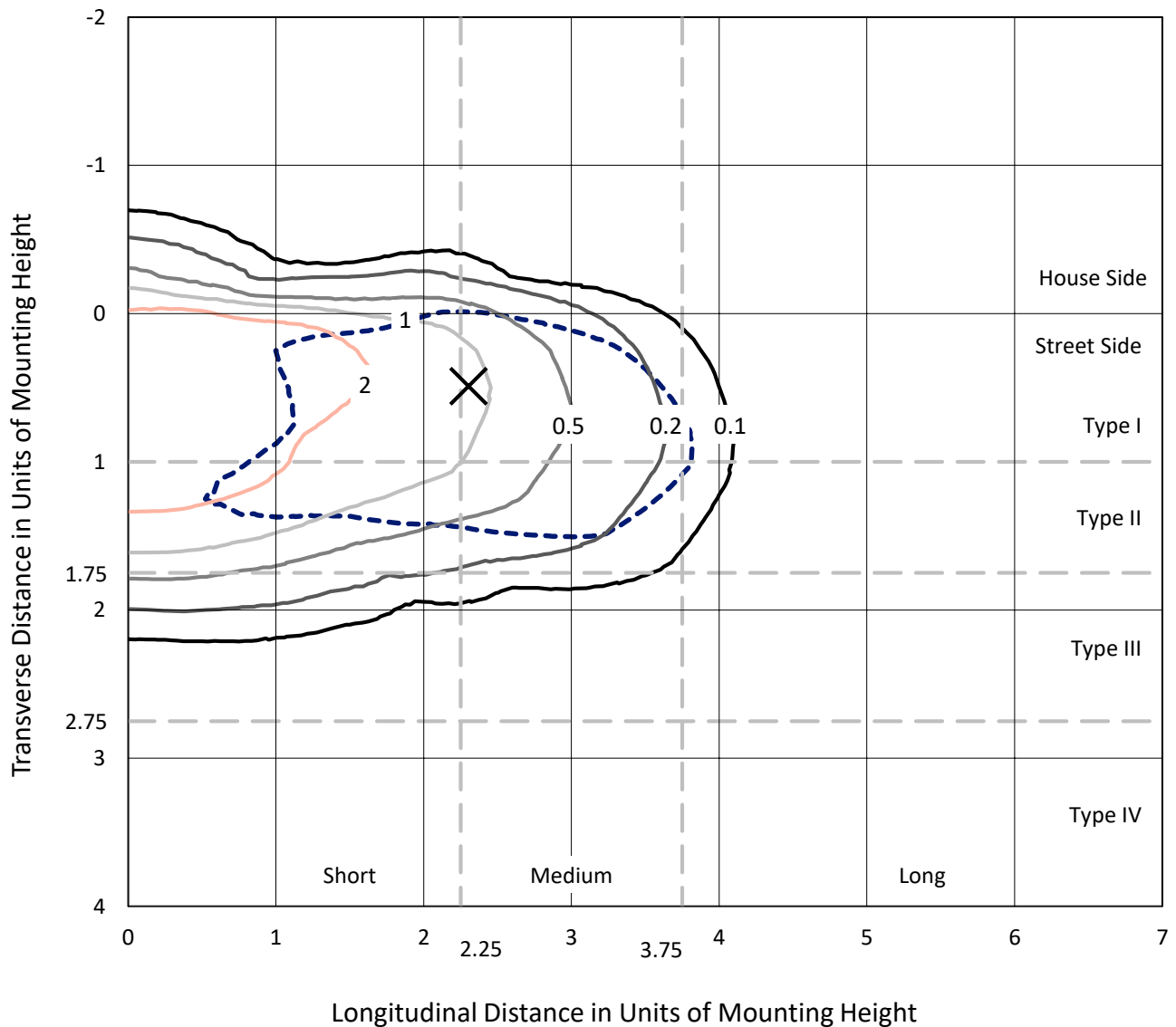


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

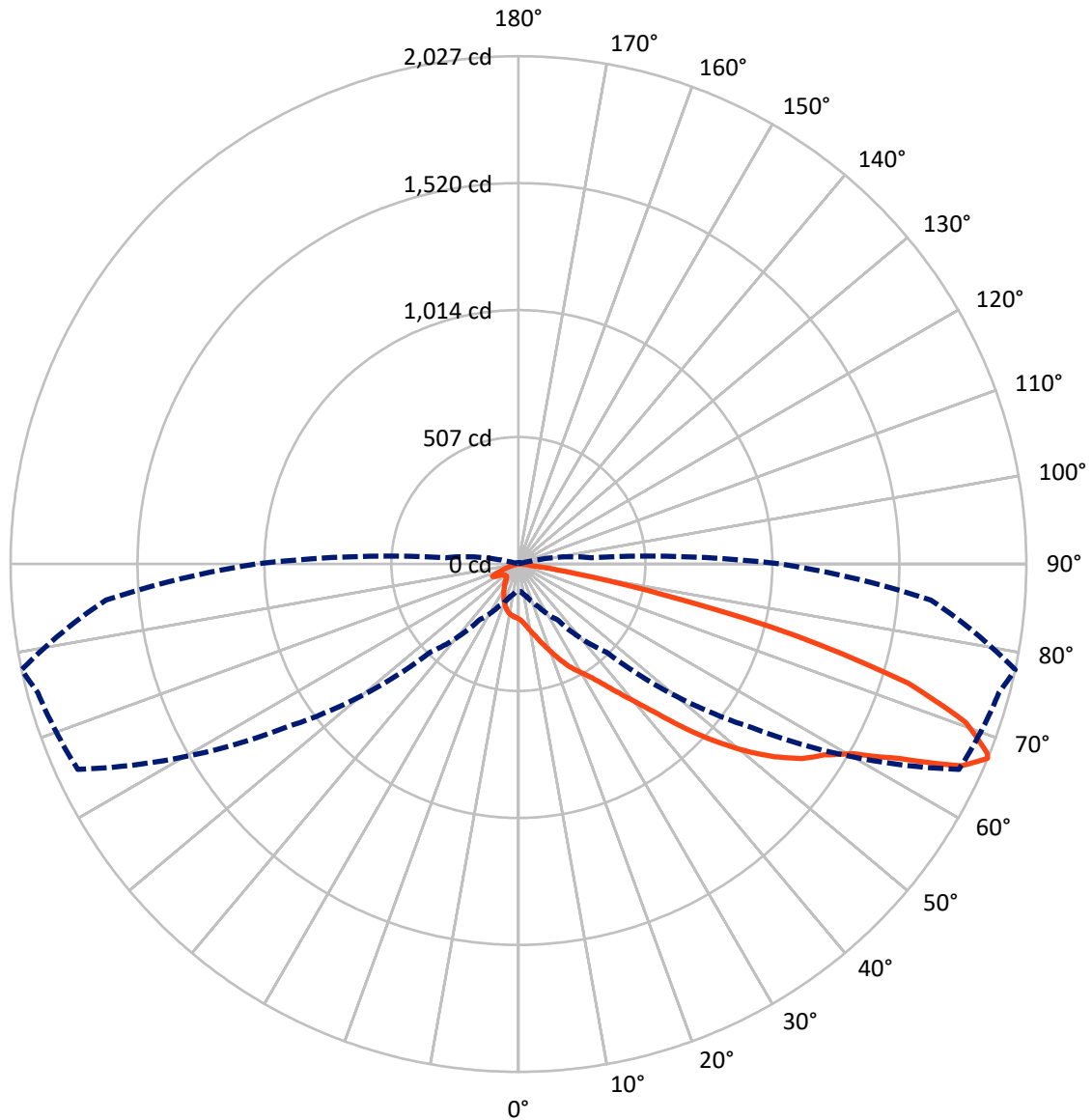


Based on 10 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	132.9	0.0	132.9
	% Fixture	7.1	0.0	7.1
<b>Street Side</b>	Lumens	1751.1	0.0	1751.1
	% Fixture	92.9	0.0	92.9
<b>Total</b>	Lumens	1884.0	0.0	1884.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.1	1.1
10°-20°	60.4	3.2
20°-30°	106.7	5.7
30°-40°	188.1	10.0
40°-50°	323.3	17.2
50°-60°	486.8	25.8
60°-70°	479.0	25.4
70°-80°	209.3	11.1
80°-90°	9.3	0.5
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°	1884.0	100.0
0°-180°	1884.0	100.0



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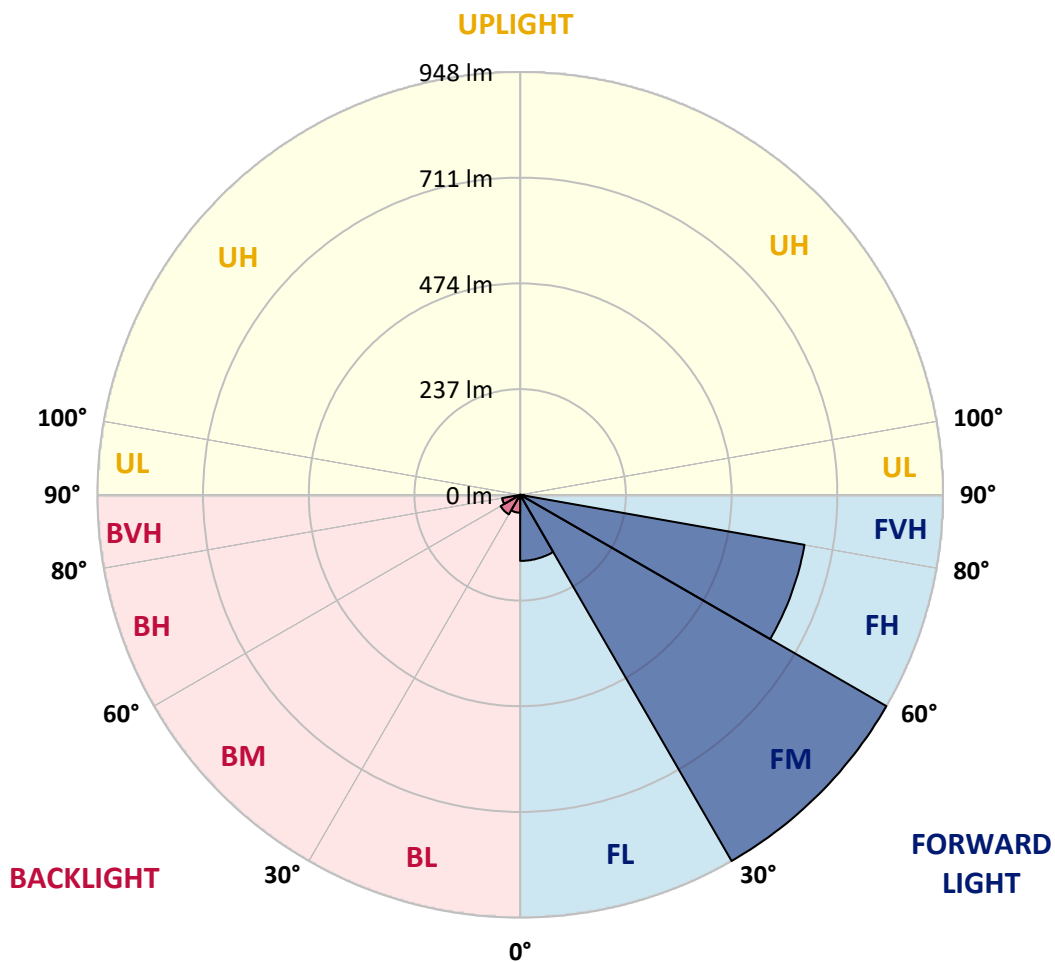
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	148.0	7.9			
FM (30°-60°)	947.7	50.3			
FH (60°-80°)	647.1	34.3			G0/660
FVH (80°-90°)	8.3	0.4			G0/10
BL (0°-30°)	40.2	2.1	B0/110		
BM (30°-60°)	50.6	2.7	B0/220		
BH (60°-80°)	41.2	2.2	B0/110		G0/110
BVH (80°-90°)	1.0	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-G0**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7
2.5°	251.0	252.0	250.6	249.5	246.7	243.2	239.6	234.3	228.7	226.5	223.0
5°	281.7	281.7	281.7	278.9	276.4	269.7	261.6	253.4	242.8	238.9	230.8
7.5°	298.0	298.4	299.4	299.4	298.0	293.4	284.6	275.4	259.4	254.1	241.0
10°	299.8	301.2	304.0	308.3	311.5	314.0	308.6	298.7	279.6	273.3	254.1
12.5°	295.2	295.9	300.5	308.3	318.6	328.8	329.2	323.2	301.9	293.1	270.1
15°	284.6	285.6	292.4	304.8	320.7	339.1	349.7	347.9	328.1	317.9	287.8
17.5°	267.6	268.7	277.1	295.6	318.9	345.8	368.5	377.3	354.0	344.0	305.8
20°	266.9	267.2	270.4	284.2	311.8	349.7	386.9	407.8	385.5	374.8	327.1
22.5°	312.2	309.4	302.3	293.4	305.5	348.6	403.5	440.0	424.4	407.8	351.5
25°	362.8	363.9	356.1	335.2	320.0	346.9	416.2	476.4	460.8	444.2	376.6
27.5°	415.9	414.1	407.4	388.3	362.8	359.6	425.5	505.8	495.9	475.7	398.9
30°	467.6	466.2	461.2	441.7	414.1	392.5	432.5	532.3	529.2	506.9	417.0
32.5°	526.7	529.2	522.8	497.3	463.7	437.1	447.8	560.3	569.5	542.3	435.7
35°	595.3	595.3	582.3	558.9	524.2	487.0	478.2	591.1	620.8	591.5	465.4
37.5°	652.0	656.6	648.8	615.2	582.6	543.7	524.6	629.0	684.2	654.5	505.4
40°	696.6	704.4	704.7	671.4	641.4	615.9	589.3	682.4	763.8	725.6	553.2
42.5°	738.0	739.4	745.4	726.3	696.2	689.5	662.2	745.8	863.3	818.3	616.9
45°	790.7	793.6	790.0	775.9	750.0	758.9	743.7	826.1	975.1	937.3	692.0
47.5°	868.2	875.0	869.7	844.2	812.7	829.3	818.3	906.1	1101.5	1055.5	773.4
50°	940.8	946.1	951.8	943.6	912.1	896.2	882.8	990.7	1209.8	1170.9	853.4
52.5°	948.6	953.6	984.7	1013.4	1034.3	992.5	950.4	1076.4	1310.0	1277.4	926.6
55°	898.0	901.2	953.2	1009.8	1105.8	1119.9	1049.8	1161.0	1393.9	1371.6	975.8
57.5°	757.1	770.6	844.5	931.3	1088.1	1195.7	1191.1	1259.4	1448.4	1438.1	1039.2
60°	497.3	512.2	600.7	732.0	957.8	1175.5	1346.1	1407.0	1524.8	1536.2	1150.3
62.5°	257.7	275.0	352.9	469.3	694.1	1023.6	1398.8	1649.4	1671.4	1709.9	1348.6
65°	147.2	150.8	189.7	275.0	429.7	733.0	1335.5	1889.4	1864.3	1942.5	1601.6
67°	109.4	109.4	136.6	186.9	272.2	498.4	1139.0	1940.0	1985.7	2027.1	1652.6
67.5°	98.0	103.4	126.7	172.4	244.2	442.1	1065.8	1926.6	1993.5	2019.3	1634.9
70°	67.3	70.8	91.0	123.5	164.6	230.1	698.7	1703.9	1920.6	1894.4	1481.6
72.5°	40.4	41.8	60.2	88.8	122.8	123.2	381.2	1293.3	1627.5	1627.1	1210.2
75°	25.1	26.5	35.4	59.5	86.0	77.2	176.3	879.9	1168.8	1146.1	810.9
77.5°	14.2	16.3	21.2	32.6	54.5	49.2	74.3	493.1	631.5	592.5	402.8
80°	5.7	6.7	12.0	15.6	30.8	29.4	30.4	173.4	255.6	230.4	134.9
82.5°	1.4	1.8	4.2	7.4	12.0	12.0	9.6	47.4	60.5	56.3	34.7
85°	0.0	0.0	0.4	0.4	0.4	0.7	2.5	5.3	6.4	7.4	5.7
87.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.7	1.1	1.1	1.1	1.1
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°	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7	218.7
2.5°	220.2	217.7	212.7	207.4	202.1	197.9	194.3	189.4	188.7	188.7	188.7
5°	224.8	219.1	207.8	196.4	185.1	174.9	167.4	161.4	156.1	154.3	155.7
7.5°	231.5	221.2	201.4	181.6	163.9	149.4	138.7	130.3	126.4	124.2	122.5
10°	240.3	224.4	192.9	163.9	141.6	124.2	112.9	104.8	100.9	98.4	98.8
12.5°	249.9	226.9	182.3	144.8	120.0	104.1	94.5	87.8	81.4	77.5	78.6
15°	259.4	228.7	169.2	127.1	103.4	89.2	75.7	63.7	59.5	58.8	58.4
17.5°	270.1	228.3	154.7	110.4	89.2	69.4	55.9	54.5	54.2	54.2	53.8
20°	281.0	226.5	138.0	96.6	75.0	52.7	50.6	49.9	48.8	48.5	48.1
22.5°	293.1	223.3	122.8	84.6	55.9	48.1	45.3	43.2	41.4	40.4	40.7
25°	304.0	217.3	108.0	73.3	47.8	43.2	39.3	36.1	34.3	32.9	33.3
27.5°	311.5	206.7	95.2	59.1	43.9	38.2	33.6	30.4	28.0	26.9	26.9
30°	312.2	191.5	83.9	48.5	40.0	33.6	28.7	25.1	23.7	23.0	22.7
32.5°	311.5	175.9	75.4	44.6	36.5	29.4	24.4	21.9	20.5	19.8	19.8
35°	315.0	160.0	67.6	41.1	32.6	25.8	21.6	19.1	18.1	17.3	17.3
37.5°	325.6	149.0	59.5	37.5	29.0	22.7	19.5	17.3	16.3	15.6	15.6
40°	340.1	139.8	49.6	34.0	25.5	20.5	17.7	15.9	14.5	13.8	13.8
42.5°	365.6	136.3	41.4	30.4	22.3	18.4	16.3	14.2	12.7	12.0	12.0
45°	403.5	138.0	37.9	27.3	20.2	16.6	14.5	12.4	11.0	10.6	10.6
47.5°	445.3	145.5	35.4	24.4	18.4	15.6	13.1	11.0	9.6	9.2	9.2
50°	492.0	157.2	33.3	21.6	16.6	14.2	11.7	9.6	8.5	8.1	8.1
52.5°	536.6	172.0	31.1	19.5	15.6	12.7	10.3	8.5	7.8	7.4	7.4
55°	570.6	181.6	29.4	18.1	14.5	11.7	9.2	8.1	7.1	6.7	6.7
57.5°	618.0	197.5	27.3	16.3	13.1	10.6	8.5	7.4	6.4	6.4	6.4
60°	714.3	240.3	24.1	14.9	11.7	9.6	8.1	6.7	6.0	5.7	5.7
62.5°	887.7	311.1	20.9	13.8	10.3	8.5	7.1	6.0	5.3	4.6	4.6
65°	1054.8	340.5	17.7	12.0	9.2	7.4	6.4	5.3	3.9	3.2	3.2
67°	1045.6	291.3	14.9	10.3	7.8	6.7	5.3	4.2	2.8	1.8	1.8
67.5°	1020.8	271.1	14.5	9.9	7.4	6.4	5.3	3.9	2.5	1.4	1.4
70°	867.5	189.7	11.3	7.8	6.4	5.7	4.2	2.8	1.4	0.7	0.7
72.5°	704.7	150.4	8.8	6.4	5.3	4.2	3.5	1.8	1.1	0.4	0.4
75°	498.4	92.4	7.8	5.7	4.2	3.2	2.8	1.8	1.1	0.7	0.4
77.5°	246.0	42.5	6.4	5.0	3.9	3.2	2.5	2.1	1.8	1.4	0.7
80°	72.2	13.8	4.2	3.5	3.5	3.2	2.8	2.5	2.1	1.8	1.1
82.5°	16.3	5.0	1.4	1.8	2.5	2.5	2.5	1.8	1.4	0.7	0.4
85°	2.1	1.1	1.1	1.1	1.4	1.4	1.1	0.7	0.7	0.0	0.0
87.5°	0.7	0.7	0.7	1.1	1.1	1.1	0.7	0.4	0.4	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)