

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: P400939

Luminaire Tested: **ENT-SA1A-735-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400939  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-735-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1973 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full 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

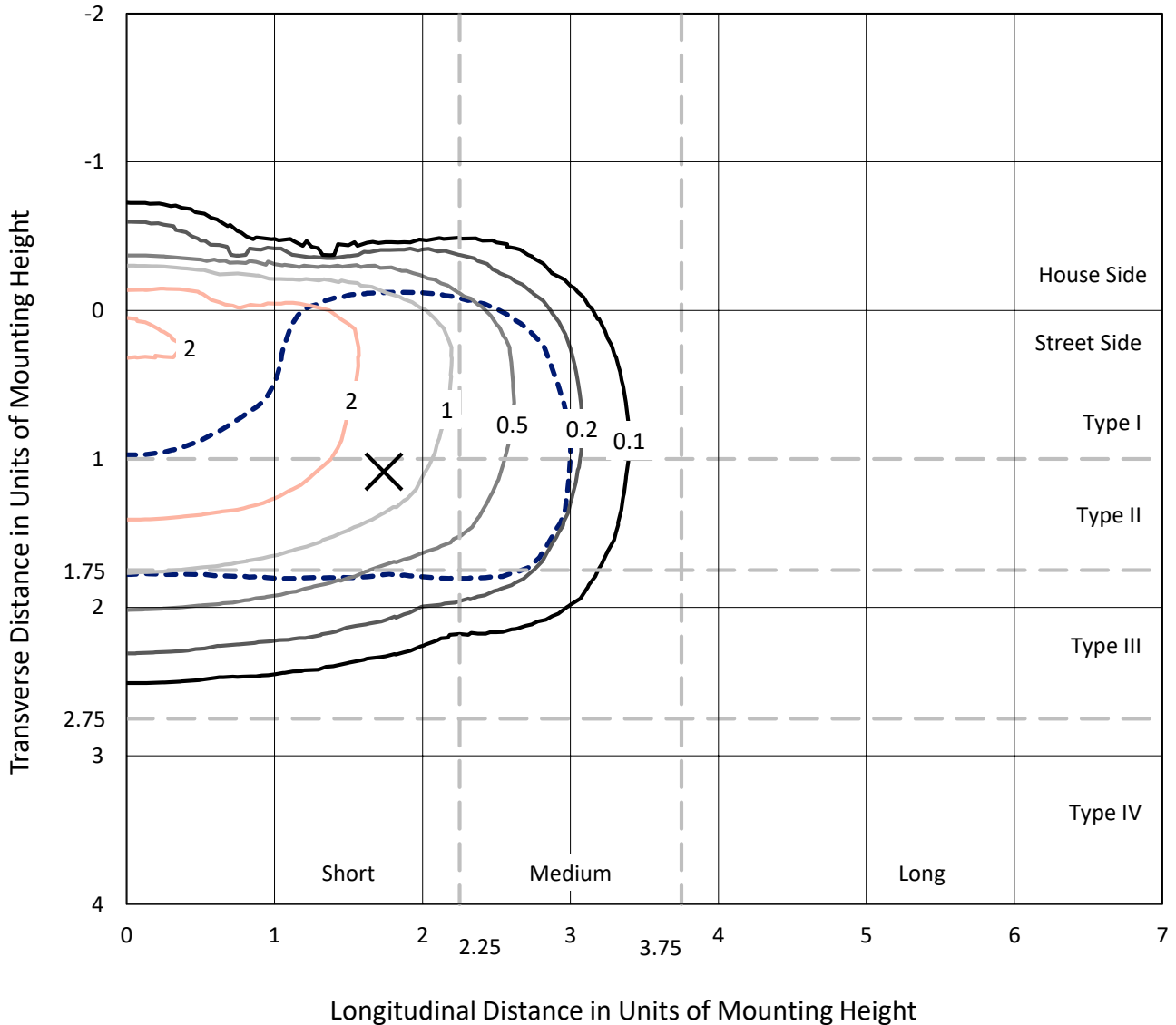


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

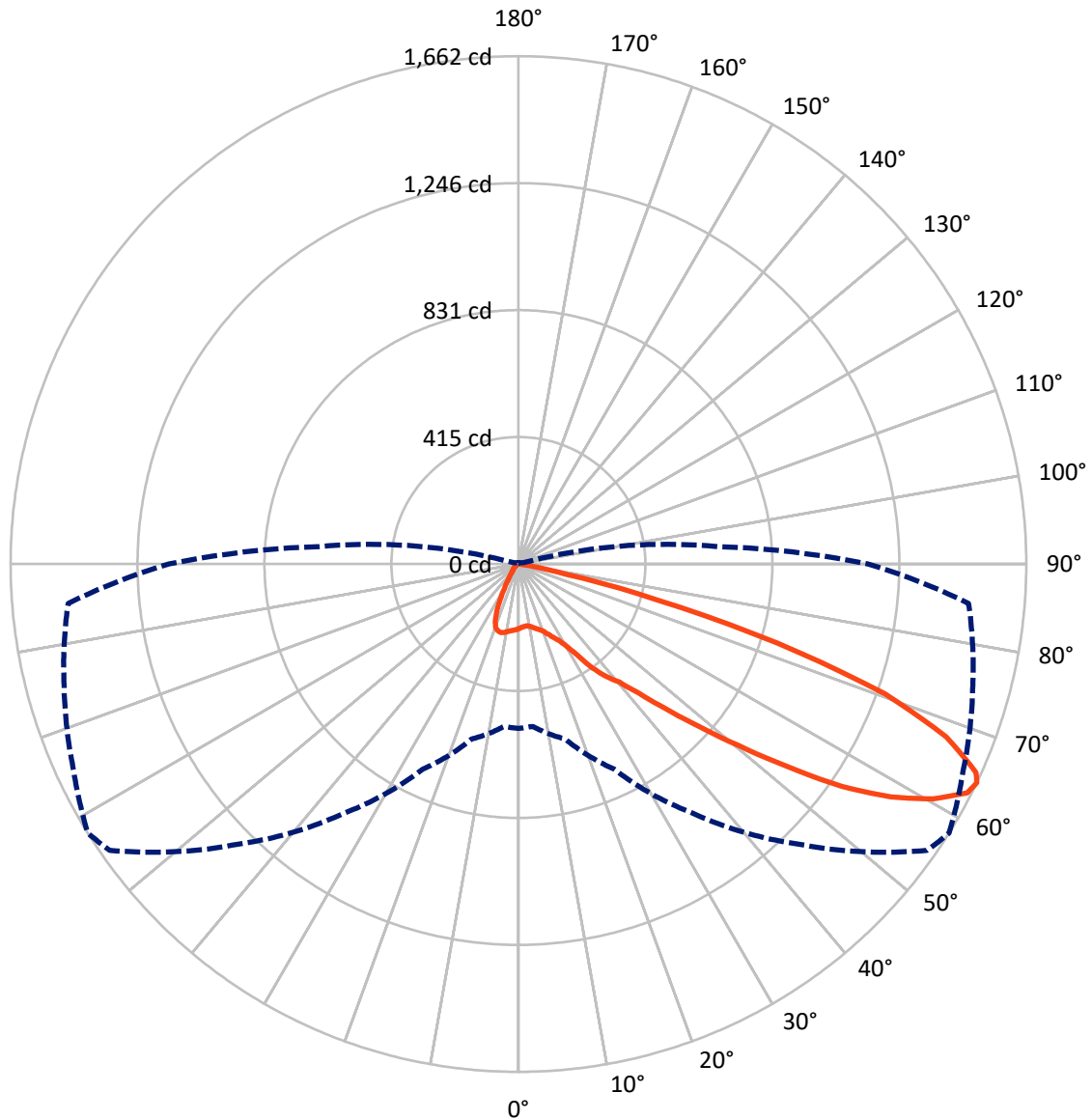


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	235.2	0.0	235.2
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	1737.8	0.0	1737.8
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	1973.0	0.0	1973.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.0	1.0
10°-20°	58.2	3.0
20°-30°	104.6	5.3
30°-40°	183.4	9.3
40°-50°	335.3	17.0
50°-60°	573.5	29.1
60°-70°	556.4	28.2
70°-80°	137.8	7.0
80°-90°	3.9	0.2
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°	1973.0	100.0
0°-180°	1973.0	100.0



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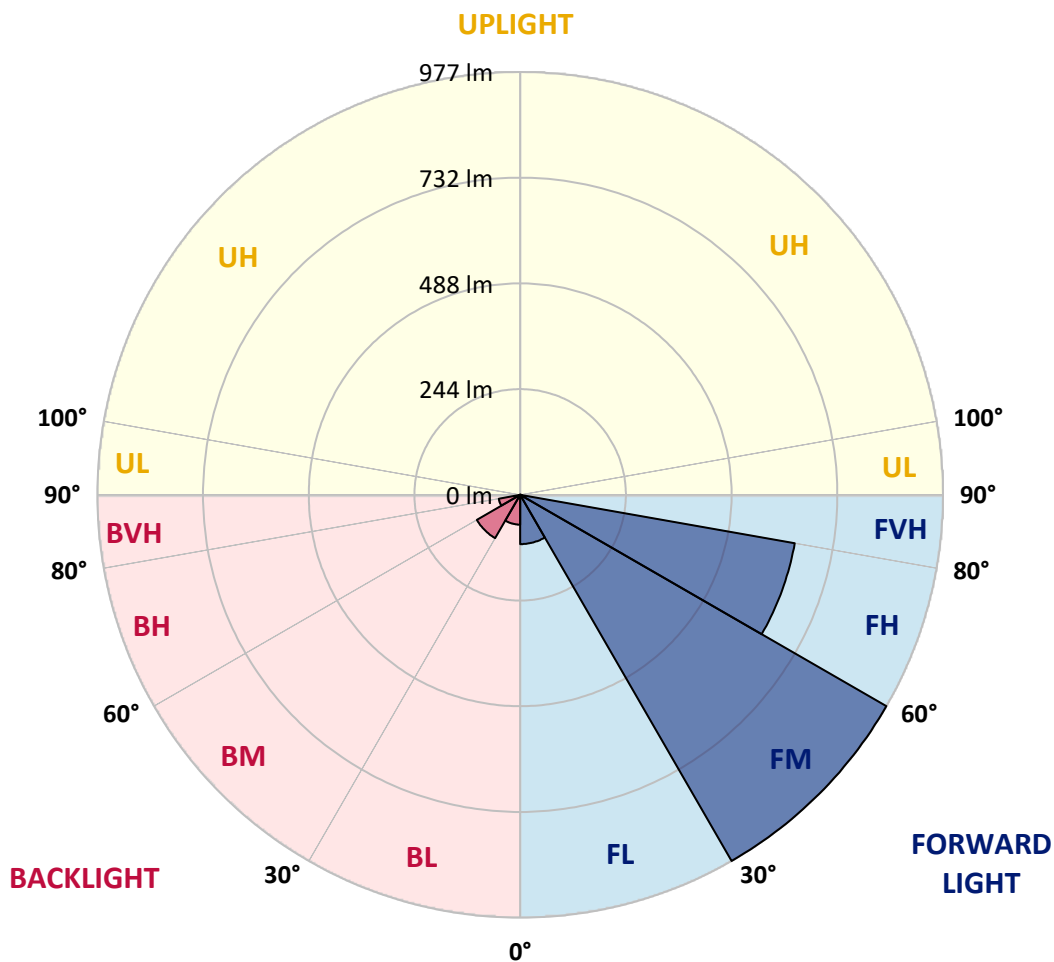
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	113.9	5.8			
FM (30°-60°)	976.6	49.5			
FH (60°-80°)	643.9	32.6			G0/660
FVH (80°-90°)	3.3	0.2			G0/10
BL (0°-30°)	68.9	3.5	B0/110		
BM (30°-60°)	115.5	5.9	B0/220		
BH (60°-80°)	50.2	2.5	B0/110		G0/110
BVH (80°-90°)	0.6	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-G0**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3
2.5°	202.6	202.6	203.3	203.7	204.8	205.9	207.3	207.7	208.4	210.2	211.0
5°	191.6	192.0	192.7	194.6	197.1	200.0	203.7	204.8	207.7	211.3	213.9
7.5°	187.3	187.6	188.7	190.9	194.2	198.6	202.9	204.4	208.4	214.3	217.9
10°	186.5	186.5	188.0	191.3	195.3	200.8	205.5	207.3	212.8	219.7	225.6
12.5°	186.5	186.5	188.3	192.4	197.1	204.0	210.6	213.2	219.4	228.1	235.4
15°	189.8	190.5	191.6	194.2	199.7	207.3	216.5	219.4	227.0	237.6	246.7
17.5°	213.2	212.4	208.8	205.5	204.4	211.0	221.9	225.9	237.3	250.8	260.6
20°	258.4	258.1	251.5	235.4	221.2	217.5	230.3	235.1	251.5	269.4	276.7
22.5°	313.2	315.0	304.8	283.2	254.0	235.4	242.7	249.3	270.5	292.0	296.4
25°	367.6	369.8	360.3	333.3	297.5	265.0	259.9	265.7	289.8	311.4	309.5
27.5°	431.8	430.0	420.5	389.8	348.2	304.8	282.9	284.0	302.6	326.7	320.8
30°	478.9	476.3	467.2	446.4	407.4	357.7	315.7	312.4	317.9	344.6	338.4
32.5°	522.0	523.8	516.9	489.1	452.2	412.1	365.0	356.3	354.1	376.7	366.5
35°	564.7	564.3	561.8	537.3	501.2	463.2	423.8	417.6	416.8	438.7	411.0
37.5°	615.8	613.2	608.5	583.7	554.8	518.7	476.7	466.8	465.0	469.4	436.9
40°	670.5	673.8	666.1	640.2	608.8	581.8	523.1	508.1	495.7	508.5	487.7
42.5°	751.9	754.5	741.0	723.1	682.6	657.4	597.9	577.4	571.6	591.0	567.6
45°	854.1	849.4	840.3	827.8	794.3	755.9	693.9	674.5	668.3	701.5	663.2
47.5°	933.7	933.0	933.3	930.8	925.7	879.7	805.9	792.8	786.6	834.4	792.1
50°	984.1	987.0	999.4	1031.2	1054.5	1035.2	948.7	932.6	927.9	977.5	920.2
52.5°	1022.0	1029.0	1049.8	1112.6	1187.4	1193.9	1122.4	1099.8	1088.8	1102.7	1023.1
55°	1041.4	1044.7	1076.4	1169.1	1286.3	1333.4	1303.5	1284.5	1240.3	1214.0	1143.9
57.5°	996.1	991.0	1045.8	1163.7	1337.4	1445.8	1458.6	1437.0	1366.2	1345.8	1290.7
60°	877.5	875.3	937.0	1078.6	1292.9	1472.1	1573.6	1560.1	1495.1	1446.5	1394.7
62.5°	669.4	673.1	738.4	882.6	1134.1	1396.5	1637.4	1648.4	1579.4	1507.1	1471.7
64°	537.7	533.3	593.1	739.9	995.0	1295.8	1632.7	1661.5	1605.0	1538.9	1478.7
65°	451.5	442.0	499.3	632.2	877.5	1222.8	1599.1	1645.5	1606.8	1546.5	1453.5
67.5°	237.6	242.7	267.2	384.0	592.4	924.6	1440.0	1510.0	1525.7	1441.8	1266.6
70°	106.6	107.3	123.0	196.0	327.8	599.7	1158.2	1271.7	1280.5	1184.5	917.6
72.5°	35.4	35.8	54.4	78.5	137.6	277.8	782.2	885.5	904.5	768.0	497.9
75°	21.9	22.6	28.8	42.3	63.9	97.1	396.4	466.5	470.5	340.6	181.0
77.5°	13.9	14.6	17.5	25.2	35.0	36.9	129.9	157.3	178.1	122.6	56.2
80°	8.8	8.8	11.3	15.3	18.3	15.7	35.4	46.7	56.2	41.2	19.0
82.5°	3.3	3.3	5.8	8.4	7.7	5.5	9.5	12.4	21.5	20.4	9.1
85°	0.0	0.0	0.4	0.7	0.4	0.7	1.8	2.6	4.0	5.8	2.9
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.7	0.7	0.7	0.7
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°	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3	211.3
2.5°	212.1	212.8	214.3	214.6	215.0	213.9	215.0	213.9	214.6	214.6	214.6
5°	215.4	216.5	217.5	217.9	217.5	215.0	215.7	213.9	213.5	213.5	213.5
7.5°	219.7	220.8	222.7	221.6	219.4	215.7	215.4	212.8	211.7	211.7	212.1
10°	227.8	228.9	229.6	227.4	223.0	217.5	213.5	208.1	205.5	204.4	204.4
12.5°	238.0	239.1	238.7	235.1	227.0	215.7	204.4	193.8	186.2	183.2	180.3
15°	248.9	250.4	249.7	242.0	226.7	206.6	184.7	159.9	144.5	134.7	132.9
17.5°	261.7	263.2	259.5	245.7	221.2	187.3	145.6	112.1	89.8	81.4	81.0
20°	277.4	276.7	267.9	246.0	211.3	151.5	97.5	70.1	60.6	58.4	58.0
22.5°	295.3	292.0	275.9	243.8	184.3	102.9	62.8	55.5	54.4	53.7	53.7
25°	305.5	299.7	278.9	237.6	142.0	65.7	53.3	51.8	50.4	48.9	48.5
27.5°	313.5	304.8	280.0	217.2	94.5	50.4	48.2	46.7	44.5	42.3	42.0
30°	328.1	315.0	281.8	181.4	58.0	43.1	42.0	39.4	36.1	33.9	33.2
32.5°	354.4	335.4	289.1	135.8	42.3	38.0	35.0	31.8	28.1	25.9	25.9
35°	382.5	354.8	292.7	89.4	36.9	33.2	28.8	24.8	21.5	19.7	19.3
37.5°	408.4	382.5	291.6	54.8	32.9	28.5	23.7	19.7	16.8	15.3	15.3
40°	461.4	431.1	276.7	37.6	28.8	24.1	19.3	15.3	13.5	12.4	12.4
42.5°	536.9	484.4	243.5	32.1	25.2	20.1	15.3	12.8	11.3	10.2	10.2
45°	621.6	543.1	194.2	28.8	21.9	16.8	12.8	10.6	9.1	8.8	8.8
47.5°	732.6	614.3	142.7	25.9	19.0	14.2	10.6	8.8	8.0	7.7	7.7
50°	829.7	672.0	97.5	22.6	16.8	12.0	9.1	8.0	7.3	6.9	6.9
52.5°	918.0	712.1	64.2	19.7	15.0	9.9	8.4	7.3	6.9	6.6	6.6
55°	1022.0	742.8	43.4	17.2	13.1	9.1	8.0	7.3	6.6	6.6	6.2
57.5°	1110.4	761.0	31.0	14.6	11.7	8.4	7.7	6.9	6.2	5.8	5.8
60°	1161.8	739.5	22.6	12.8	10.2	7.7	6.9	6.2	5.8	5.5	5.5
62.5°	1176.1	697.9	17.5	11.0	8.8	6.9	6.2	5.5	5.1	4.7	4.7
64°	1143.2	653.4	15.0	9.5	7.7	6.2	5.8	5.1	4.4	3.7	3.7
65°	1096.9	612.1	13.5	8.8	6.9	5.8	5.5	4.7	3.7	2.9	2.9
67.5°	914.0	488.0	11.0	7.3	5.5	5.1	4.4	3.7	2.6	1.8	1.8
70°	649.0	341.3	8.4	5.8	4.7	4.7	4.0	2.9	1.5	0.7	0.7
72.5°	343.5	177.4	6.9	4.7	3.7	3.7	3.3	1.8	1.1	0.7	0.4
75°	120.1	58.4	5.8	4.0	3.3	2.6	2.2	1.5	1.1	0.7	0.4
77.5°	36.5	19.3	5.1	4.0	2.9	2.2	2.6	2.2	2.2	1.5	1.1
80°	11.7	6.9	2.9	2.6	2.9	2.9	2.6	2.2	2.6	1.8	1.5
82.5°	4.4	2.6	1.1	1.5	1.5	1.8	1.8	1.5	1.1	0.4	0.0
85°	1.5	1.1	0.7	1.1	1.1	1.1	0.7	0.7	0.4	0.0	0.0
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	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)