

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: P400892

Luminaire Tested: **ENV-SA1A-727-U-SL2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400892  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1A-727-U-SL2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2258 lumens  
Efficiency: N/A  
Efficacy: 112.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

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

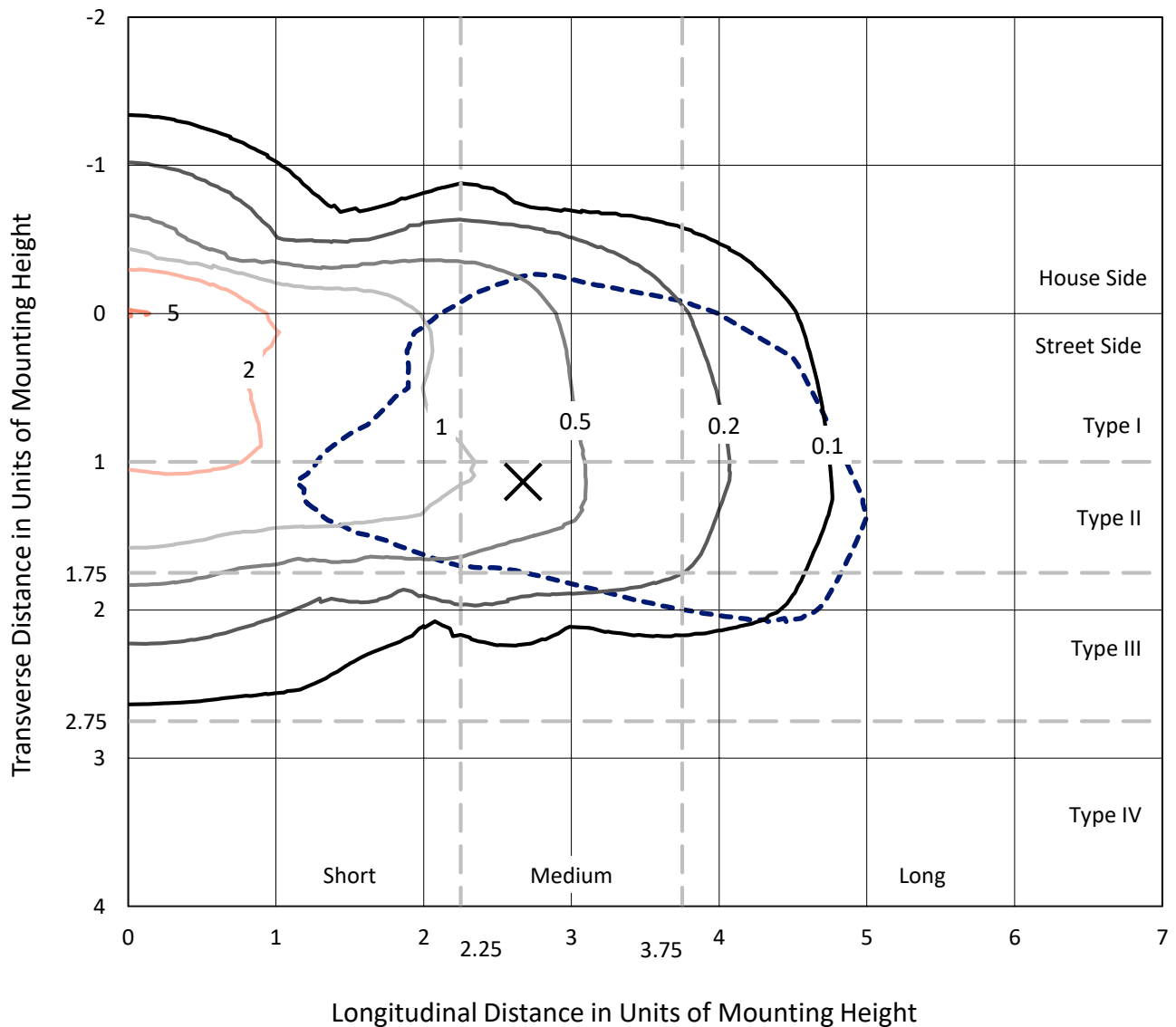


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

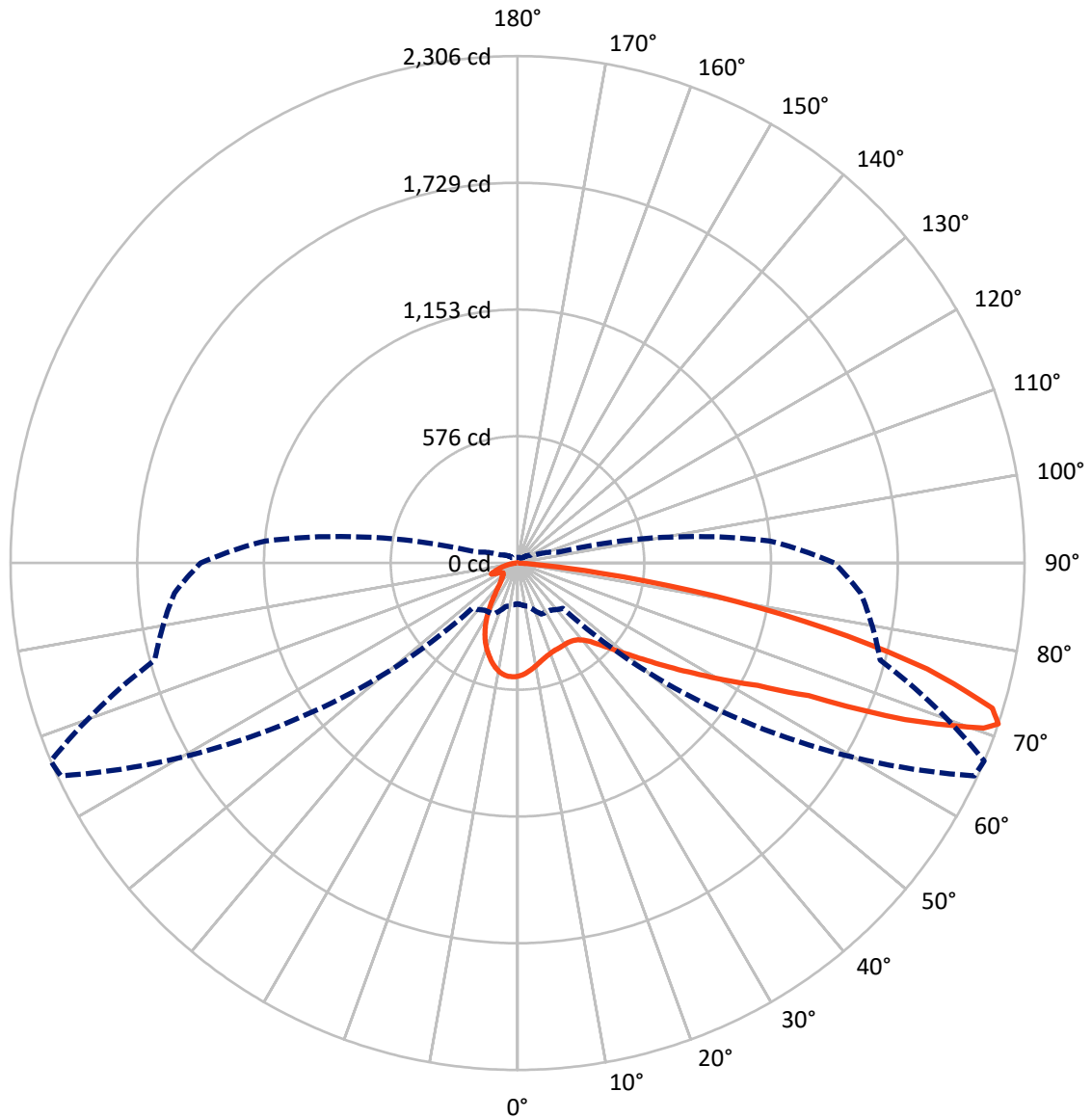


Based on 10 foot mounting height. Maximum calculated value = 5.1 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	462.6	0.0	462.6
	% Fixture	20.5	0.0	20.5
<b>Street Side</b>	Lumens	1795.4	0.0	1795.4
	% Fixture	79.5	0.0	79.5
<b>Total</b>	Lumens	2258.0	0.0	2258.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.6	2.0
10°-20°	112.1	5.0
20°-30°	151.4	6.7
30°-40°	199.4	8.8
40°-50°	284.0	12.6
50°-60°	433.8	19.2
60°-70°	541.7	24.0
70°-80°	437.3	19.4
80°-90°	52.7	2.3
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°	2258.0	100.0
0°-180°	2258.0	100.0



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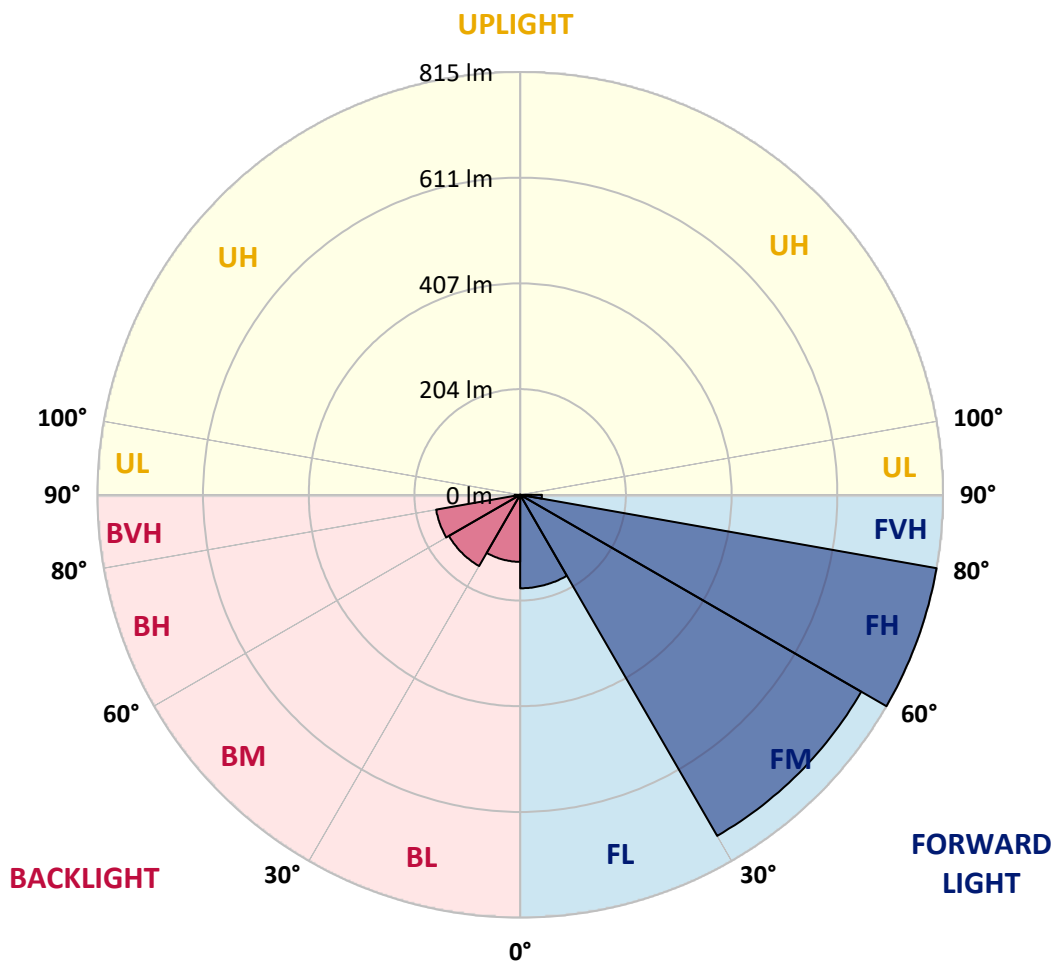
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	180.1	8.0			
FM	(30°-60°)	758.7	33.6			
FH	(60°-80°)	814.6	36.1			G1/1800
FVH	(80°-90°)	42.0	1.9			G1/100
BL	(0°-30°)	129.1	5.7	B1/500		
BM	(30°-60°)	158.5	7.0	B0/220		
BH	(60°-80°)	164.4	7.3	B1/500		G1/500
BVH	(80°-90°)	10.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9
2.5°	485.6	487.9	488.2	492.8	494.4	499.6	502.5	507.4	508.1	511.0	512.9
5°	454.1	454.4	456.4	460.3	466.5	475.9	483.0	495.1	497.3	505.8	513.3
7.5°	425.8	427.4	430.7	436.5	443.7	454.7	465.8	482.4	485.6	499.3	513.6
10°	406.6	408.3	410.9	417.4	424.5	436.9	450.2	469.4	473.0	491.8	512.6
12.5°	391.4	393.0	394.9	402.1	409.9	422.2	435.9	457.3	460.9	482.7	510.3
15°	381.3	381.6	384.2	390.1	398.8	410.9	424.5	446.6	450.8	475.6	509.7
17.5°	375.1	375.8	378.0	382.6	390.4	402.1	415.4	437.8	442.7	469.7	510.0
20°	375.4	376.1	377.4	379.0	384.5	394.6	408.6	431.3	436.2	466.1	512.3
22.5°	382.3	382.6	382.9	380.6	382.6	389.7	403.4	426.8	432.0	464.5	514.9
25°	395.3	395.3	394.6	389.4	385.2	388.1	400.5	425.2	430.4	463.2	517.5
27.5°	413.1	414.4	411.2	405.0	395.3	390.4	399.8	423.9	429.1	463.2	518.8
30°	437.5	438.2	436.9	428.7	412.8	399.5	401.8	422.9	428.1	462.6	519.1
32.5°	462.2	464.2	465.8	458.6	439.5	415.7	409.6	424.2	428.7	462.2	518.1
35°	487.3	488.6	496.4	495.1	474.3	440.1	422.2	429.4	433.3	463.9	518.8
37.5°	508.7	511.6	523.0	531.8	515.5	473.3	444.0	440.8	443.0	472.0	522.4
40°	531.8	536.0	552.9	569.5	562.3	514.9	474.9	461.3	460.6	486.9	531.1
42.5°	557.8	562.7	584.4	608.5	610.8	567.9	516.2	490.2	489.5	512.6	550.3
45°	588.3	592.9	622.5	651.1	665.1	627.0	566.9	531.1	531.5	548.4	580.9
47.5°	626.1	633.2	661.8	698.2	723.2	693.7	628.3	588.3	585.7	602.3	630.9
50°	679.0	684.9	708.6	744.0	787.9	774.3	705.7	657.3	655.3	663.1	697.9
52.5°	734.6	736.6	747.9	784.7	858.5	872.1	800.9	742.7	735.3	739.5	781.1
55°	737.9	742.1	749.6	796.1	921.9	989.5	905.9	843.5	833.8	830.8	875.7
57.5°	670.3	677.1	686.8	747.0	924.5	1125.0	1055.1	961.2	943.6	929.0	976.8
60°	526.9	535.7	553.6	627.4	858.5	1202.4	1304.1	1093.2	1077.6	1027.8	1075.6
62.5°	381.0	384.5	401.8	434.9	681.3	1206.9	1563.5	1265.4	1226.7	1124.0	1160.8
65°	306.8	312.7	317.9	317.6	403.4	1070.4	1735.8	1572.0	1455.3	1231.6	1254.4
67.5°	252.9	254.8	267.5	289.6	274.3	661.2	1753.0	2019.9	1901.6	1376.6	1365.5
70°	211.3	211.9	224.6	264.3	262.6	341.3	1469.9	2277.6	2249.0	1614.5	1539.5
71°	185.0	190.5	204.5	255.8	261.3	291.6	1248.9	2291.3	2305.6	1707.8	1566.4
72.5°	145.6	145.6	165.5	234.7	263.6	269.1	920.2	2216.9	2258.1	1813.8	1519.6
75°	85.5	84.8	95.6	163.5	269.5	268.2	502.5	1842.4	1925.9	1833.0	1406.5
77.5°	48.1	49.1	54.9	91.0	213.9	257.4	288.6	1341.5	1440.0	1533.3	1189.4
80°	22.1	23.4	27.6	44.2	126.1	222.3	206.1	871.1	908.5	921.5	562.0
82.5°	5.9	6.5	8.5	16.9	48.8	151.5	152.4	364.7	376.7	217.8	120.6
85°	0.0	0.0	0.0	0.0	0.7	18.5	43.2	65.7	54.6	28.9	24.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	1.0	1.3	1.3	1.3	1.6
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°	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9	514.9
2.5°	514.6	515.9	518.1	517.8	517.2	513.3	515.5	513.3	512.9	512.0	512.3
5°	515.9	517.8	519.1	516.2	511.3	502.9	499.9	492.5	487.6	485.0	483.7
7.5°	517.8	519.1	518.5	510.3	497.7	481.7	468.1	457.3	446.0	444.0	443.4
10°	517.8	519.1	513.9	498.3	476.5	451.5	430.7	413.1	395.6	389.1	390.1
12.5°	516.5	517.2	505.1	480.1	448.6	414.4	385.2	356.3	333.8	320.2	317.6
15°	515.5	514.6	493.4	457.3	415.4	373.2	329.0	289.9	263.3	245.4	243.1
17.5°	515.5	512.0	479.5	431.3	379.3	321.2	262.6	220.4	190.8	180.4	180.1
20°	516.2	508.4	464.5	404.4	334.5	259.4	196.0	159.9	148.9	147.2	147.6
22.5°	516.8	503.5	448.2	373.8	284.4	193.4	140.1	127.1	128.1	132.0	131.6
25°	516.2	497.0	429.1	339.7	229.8	139.4	113.1	109.9	115.7	120.3	121.6
27.5°	514.6	488.6	408.6	299.0	175.2	109.9	98.8	98.5	104.3	108.6	108.2
30°	509.7	478.5	384.9	256.1	126.4	93.6	89.1	90.0	93.9	97.8	97.8
32.5°	504.5	467.1	359.8	209.3	97.2	84.8	83.2	83.5	86.1	89.1	88.7
35°	499.0	456.0	334.2	160.6	85.2	79.6	79.0	78.7	79.6	80.3	80.3
37.5°	495.7	446.3	305.9	120.9	78.7	76.4	75.1	73.8	73.5	72.8	72.2
40°	497.0	439.8	278.6	93.6	74.8	72.8	70.9	68.9	67.6	67.0	66.6
42.5°	506.1	437.8	248.3	80.6	71.2	69.6	67.0	63.7	62.4	62.4	62.1
45°	527.2	443.7	220.1	74.1	67.9	66.0	61.8	59.5	58.5	58.8	58.8
47.5°	560.4	460.3	194.7	70.9	65.7	62.7	57.9	55.6	54.9	55.3	55.3
50°	610.1	491.5	168.7	67.9	63.1	59.2	54.9	52.3	51.4	51.4	51.4
52.5°	682.9	542.8	149.8	66.0	60.8	56.2	52.0	49.1	47.8	47.8	47.5
55°	771.7	609.8	142.7	64.7	57.9	53.6	49.1	46.2	44.2	43.6	43.9
57.5°	868.9	696.6	153.1	64.4	54.6	50.7	46.2	42.6	40.6	40.3	40.0
60°	969.0	782.7	183.0	62.7	52.0	47.1	42.9	39.7	37.7	37.1	36.7
62.5°	1055.4	868.5	232.4	61.4	50.1	43.9	39.3	36.4	34.8	33.8	33.8
65°	1159.8	967.0	307.8	63.1	49.1	40.6	36.1	33.5	32.2	31.2	31.2
67.5°	1302.2	1113.0	365.0	70.9	51.4	38.0	32.5	30.6	29.6	28.9	28.9
70°	1442.3	1194.9	253.9	83.2	57.2	35.8	29.3	28.0	27.3	26.7	26.7
71°	1440.3	1151.0	190.8	86.1	59.2	35.1	28.0	27.0	26.3	26.0	25.7
72.5°	1368.1	1046.3	136.8	83.5	58.2	33.2	26.3	25.4	24.7	24.7	24.4
75°	1227.1	922.2	106.9	69.9	48.8	29.6	23.4	22.8	22.1	21.8	22.1
77.5°	1005.4	737.9	84.2	55.3	37.1	24.4	20.8	19.8	19.5	19.2	19.5
80°	461.9	321.5	61.4	42.9	27.6	19.5	17.6	17.2	16.9	16.6	16.6
82.5°	111.2	90.0	32.8	28.6	18.9	15.0	14.0	14.0	14.0	13.7	13.7
85°	24.4	24.4	13.3	13.3	11.4	10.4	11.1	11.1	11.1	10.4	10.4
87.5°	1.3	3.9	4.2	6.2	6.5	6.2	7.5	7.8	7.5	7.2	6.8
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)