

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: P400956

Luminaire Tested: **ENT-SA1A-740-U-SL4**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400956
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-740-U-SL4
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2592 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

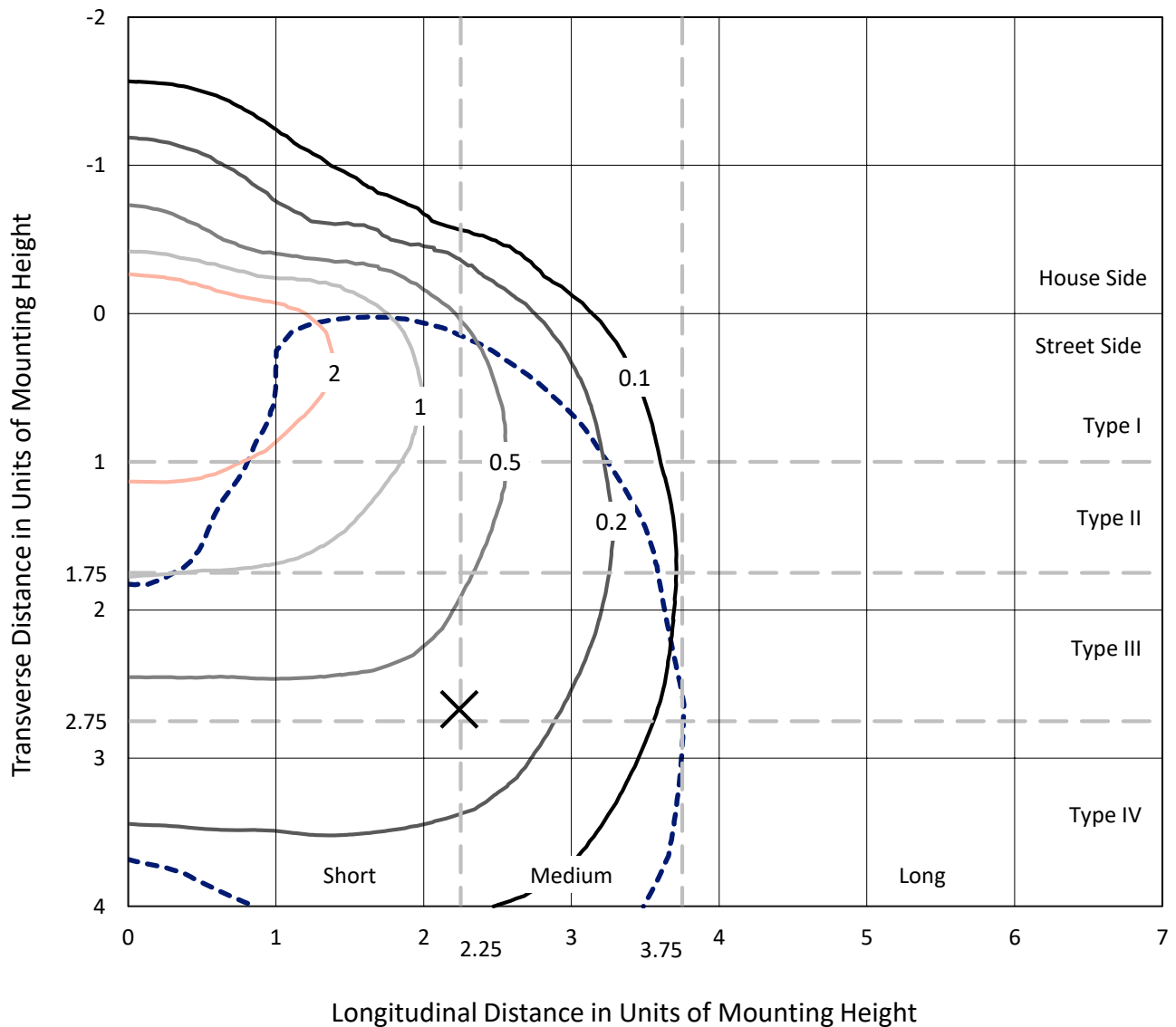
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

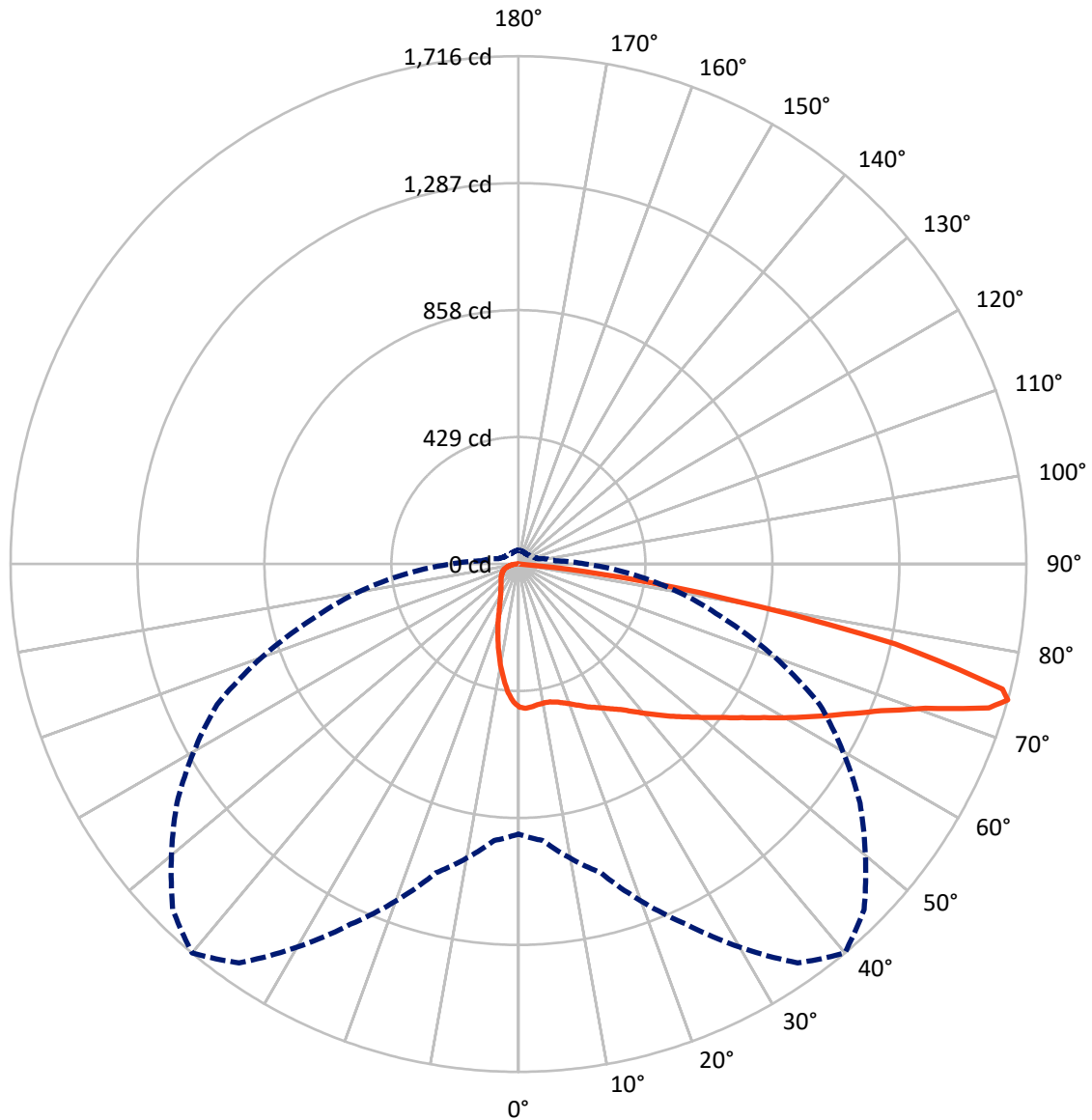


Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	404.1	0.0	404.1
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	2187.9	0.0	2187.9
	% Fixture	84.4	0.0	84.4
Total	Lumens	2592.0	0.0	2592.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	1.6
10°-20°	110.0	4.2
20°-30°	168.7	6.5
30°-40°	243.7	9.4
40°-50°	350.5	13.5
50°-60°	484.0	18.7
60°-70°	610.2	23.5
70°-80°	529.2	20.4
80°-90°	53.0	2.0
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°	2592.0	100.0
0°-180°	2592.0	100.0



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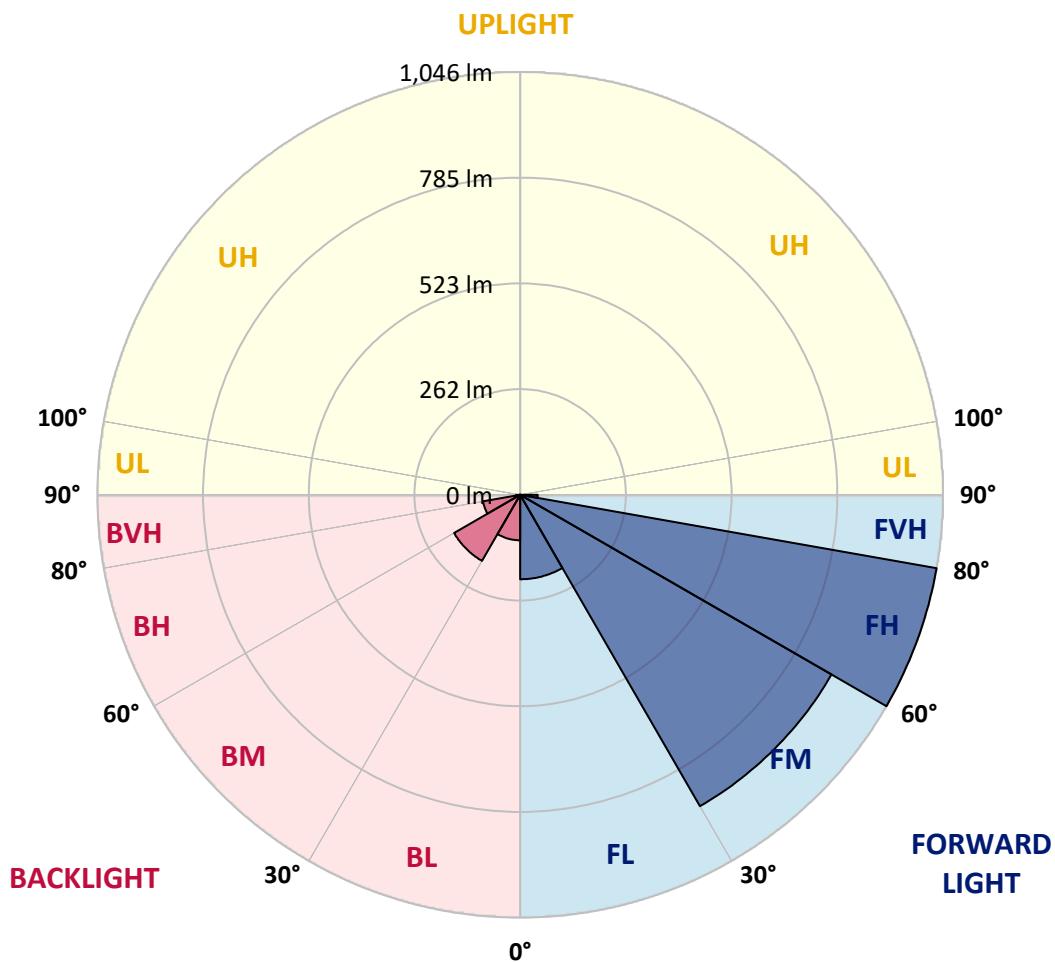
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	209.0	8.1			
FM (30°-60°)	889.5	34.3			
FH (60°-80°)	1046.1	40.4			G1/1800
FVH (80°-90°)	43.3	1.7			G1/100
BL (0°-30°)	112.5	4.3	B1/500		
BM (30°-60°)	188.7	7.3	B0/220		
BH (60°-80°)	93.3	3.6	B0/110		G0/110
BVH (80°-90°)	9.7	0.4			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8
2.5°	490.0	489.7	490.8	490.0	488.9	488.1	487.7	485.4	484.6	482.3	479.2
5°	488.1	488.1	488.1	487.3	485.0	484.2	483.4	479.9	477.6	473.7	467.9
7.5°	481.5	482.7	482.3	481.9	479.9	479.2	478.0	473.7	470.6	464.8	457.4
10°	475.3	475.3	475.7	477.2	476.4	476.8	476.4	471.8	467.5	460.1	450.8
12.5°	466.3	467.9	470.2	474.5	476.4	478.0	478.0	474.5	469.8	460.9	450.0
15°	460.9	462.8	468.7	476.4	481.1	483.8	484.6	480.3	474.5	465.6	453.5
17.5°	458.6	460.9	471.8	482.7	490.8	493.2	493.5	488.9	482.7	471.8	457.8
20°	460.9	463.6	478.0	492.8	502.5	504.4	505.2	498.6	490.8	480.3	462.1
22.5°	469.8	473.7	489.7	505.6	515.7	518.4	517.6	508.3	500.5	489.3	467.5
25°	489.3	491.6	506.0	523.1	530.9	534.0	532.0	521.5	511.4	500.2	475.3
27.5°	511.8	514.9	530.1	542.9	548.0	548.7	546.8	535.9	524.6	515.3	487.3
30°	539.0	541.7	554.2	563.9	564.3	564.7	563.5	551.1	541.7	534.4	504.8
32.5°	567.8	568.2	581.0	585.6	582.5	583.7	582.5	568.9	562.3	560.0	527.7
35°	594.2	594.6	607.8	609.4	604.3	604.7	607.0	591.1	591.1	596.5	561.9
37.5°	619.5	620.6	632.3	630.7	628.8	632.3	635.4	621.8	629.6	645.1	603.5
40°	638.5	641.2	656.8	656.0	660.3	663.8	666.5	659.5	671.9	702.2	654.8
42.5°	650.9	656.4	678.5	684.0	691.4	697.6	702.2	701.8	723.6	765.6	709.2
45°	663.8	669.2	698.7	711.9	724.4	734.1	743.0	747.7	782.3	832.4	772.6
47.5°	679.3	684.0	717.0	743.0	759.0	772.2	788.1	798.2	842.1	900.4	831.3
50°	703.0	706.1	735.7	776.1	796.3	814.5	834.4	855.0	906.6	970.0	882.6
52.5°	733.7	735.7	757.4	809.5	841.7	861.2	890.7	917.9	972.3	1032.9	924.5
55°	768.7	767.1	783.8	849.5	887.2	916.4	952.9	980.5	1041.5	1087.7	957.9
57.5°	803.7	802.5	815.7	888.0	944.7	978.9	1016.6	1045.8	1104.8	1139.0	982.0
60°	837.1	832.8	851.5	933.1	1014.3	1053.5	1087.4	1114.2	1164.7	1176.0	994.9
62.5°	866.6	866.6	893.8	988.6	1097.5	1132.8	1159.6	1177.5	1221.8	1203.2	989.8
65°	893.8	897.3	936.2	1050.8	1183.7	1219.9	1243.2	1250.2	1278.6	1204.3	947.1
67.5°	924.5	930.0	984.8	1123.5	1283.2	1321.7	1341.9	1339.6	1319.0	1186.5	855.3
70°	954.4	963.4	1045.0	1217.2	1406.0	1458.1	1480.2	1434.4	1340.0	1087.4	710.4
72.5°	976.2	991.4	1094.4	1310.8	1582.1	1662.1	1653.2	1460.4	1241.6	896.2	537.5
74°	912.5	937.7	1080.7	1343.1	1645.4	1715.8	1651.6	1408.7	1123.1	721.7	380.8
75°	838.3	862.7	1012.0	1330.2	1657.5	1688.9	1571.6	1317.8	1007.3	559.2	248.7
77.5°	620.6	639.7	777.2	1048.9	1310.8	1301.5	1170.1	893.0	496.3	168.7	104.9
80°	274.0	288.4	383.6	527.7	710.0	707.3	658.7	410.4	160.1	88.2	64.1
82.5°	82.8	82.4	110.4	153.9	269.7	274.8	233.6	141.5	76.6	36.5	31.1
85°	0.4	0.4	0.4	0.4	1.2	10.1	8.5	27.2	14.0	6.6	11.3
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8
2.5°	477.2	476.8	475.7	472.9	471.0	465.2	467.1	463.2	462.8	462.1	461.7
5°	465.2	463.6	459.0	453.5	447.3	437.6	434.5	428.6	425.1	424.0	424.8
7.5°	452.7	449.2	440.3	428.6	416.2	401.8	391.3	383.2	377.3	375.4	372.7
10°	445.0	439.1	424.0	404.6	384.3	364.1	346.6	334.6	325.7	318.7	318.7
12.5°	442.2	434.5	412.3	384.0	354.8	326.1	300.8	284.9	269.7	262.3	261.2
15°	443.8	432.9	402.6	365.3	326.4	289.1	258.0	235.1	220.7	211.8	214.9
17.5°	445.4	431.8	392.5	345.5	298.8	255.7	219.6	193.5	176.0	171.4	169.4
20°	447.3	429.4	379.7	324.1	270.5	223.5	185.4	158.9	145.7	139.9	139.9
22.5°	450.0	426.3	366.5	300.4	241.3	192.0	156.6	136.8	126.3	122.8	122.8
25°	453.9	424.4	352.9	276.7	213.7	167.1	137.6	122.0	116.6	114.3	113.9
27.5°	461.3	424.8	339.7	252.6	186.5	146.1	124.0	113.9	109.6	108.4	108.0
30°	472.6	428.6	325.7	227.0	162.4	130.2	114.6	107.6	104.9	104.1	104.1
32.5°	488.1	435.6	314.0	204.0	144.6	117.4	106.9	102.2	100.7	99.9	100.3
35°	512.2	447.7	300.0	183.0	127.9	108.4	100.7	97.2	96.0	96.0	96.4
37.5°	543.7	466.3	286.4	163.6	116.6	100.7	94.8	92.9	91.7	92.5	92.9
40°	583.3	488.5	273.6	146.1	107.3	94.4	89.8	88.2	87.8	88.6	89.4
42.5°	626.1	515.3	261.9	131.7	99.9	89.4	85.5	84.7	84.3	84.7	85.9
45°	675.8	546.0	252.2	120.9	94.4	85.1	81.6	80.8	80.4	81.2	82.0
47.5°	721.7	573.6	244.4	113.5	89.8	82.0	78.5	77.3	77.3	77.3	78.1
50°	759.0	595.4	239.8	108.4	85.9	78.5	75.4	74.2	73.8	73.4	73.8
52.5°	791.2	611.7	238.2	105.3	82.8	75.4	72.3	71.5	70.7	70.0	70.3
55°	812.6	619.8	235.1	102.6	80.1	71.9	69.2	68.4	67.6	66.5	66.5
57.5°	825.0	619.1	228.1	101.0	78.5	68.8	66.1	66.1	65.3	63.3	63.7
60°	826.2	605.5	211.0	99.1	77.3	65.7	62.6	63.3	63.3	61.8	61.8
62.5°	806.4	569.7	178.0	94.0	75.8	63.3	59.8	61.8	62.6	61.0	61.0
65°	745.4	485.4	143.0	86.7	71.9	60.6	56.7	60.6	63.0	61.8	61.4
67.5°	628.4	384.3	118.1	78.5	67.6	57.1	53.6	58.7	61.8	61.8	61.4
70°	504.4	291.9	97.2	69.6	61.0	52.9	50.1	54.4	57.1	57.9	57.9
72.5°	347.4	178.4	78.9	59.8	53.6	47.8	45.5	48.2	49.7	51.3	50.9
74°	224.2	125.1	69.2	54.4	49.0	43.9	42.7	43.9	44.7	46.2	46.6
75°	150.0	102.2	64.5	50.5	46.2	41.2	40.4	41.6	42.4	43.5	43.5
77.5°	86.3	73.1	52.1	42.0	38.5	35.4	35.0	35.4	36.5	37.7	37.3
80°	59.8	55.6	41.2	32.6	30.3	28.8	29.1	29.5	31.5	31.9	31.5
82.5°	36.1	40.0	29.1	24.5	22.9	22.5	23.7	24.5	26.0	26.4	26.0
85°	14.4	19.0	14.4	13.6	15.2	16.7	18.7	19.8	20.6	20.6	20.6
87.5°	0.0	2.7	3.5	5.4	8.5	10.1	13.2	14.4	15.2	14.8	14.4
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)