

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: P401112

Luminaire Tested: **ENT-SA1B-735-U-SL4**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401112
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-SA1B-735-U-SL4
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA 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: 3053 lumens
Efficiency: N/A
Efficacy: 120.2 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

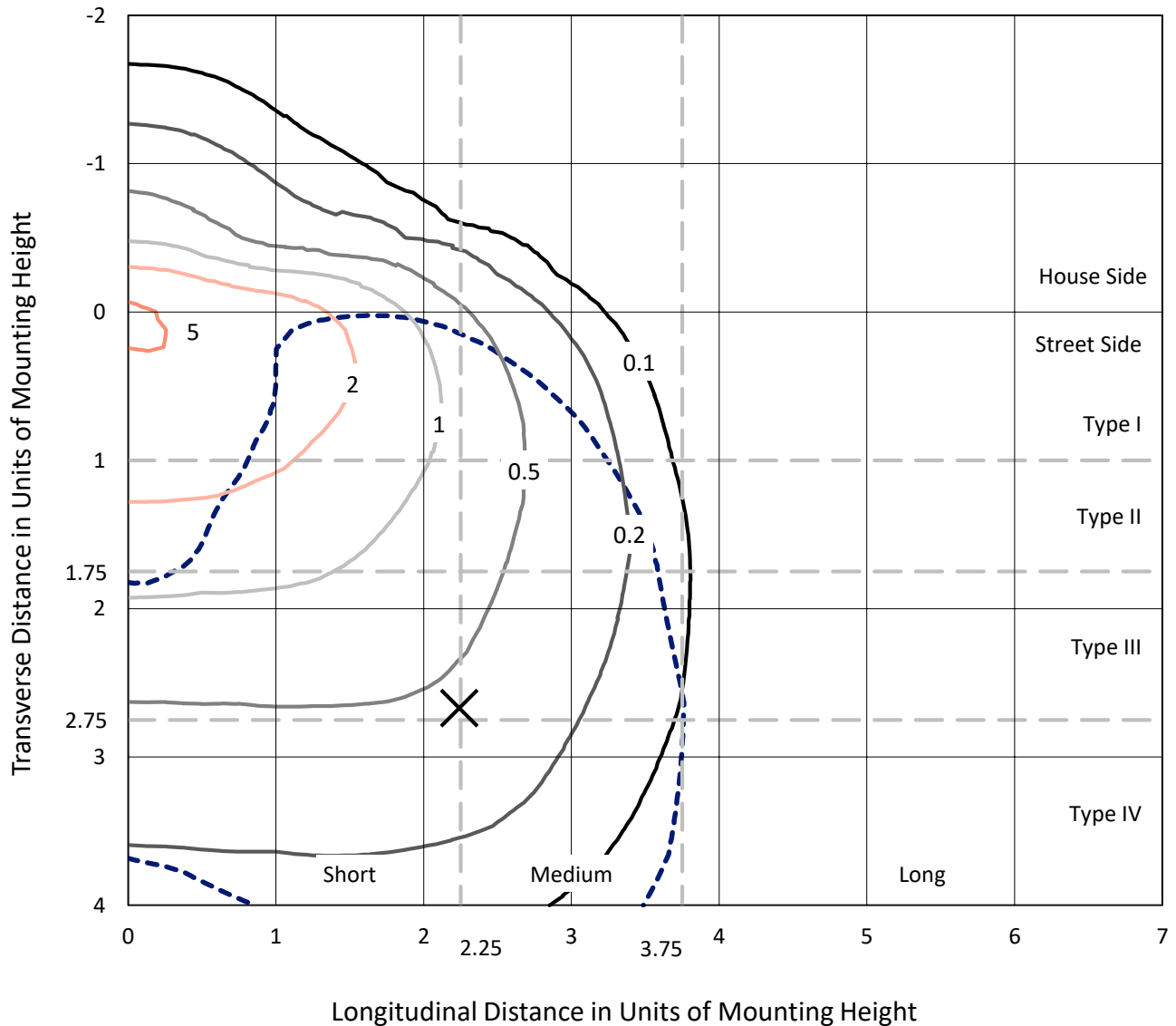
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

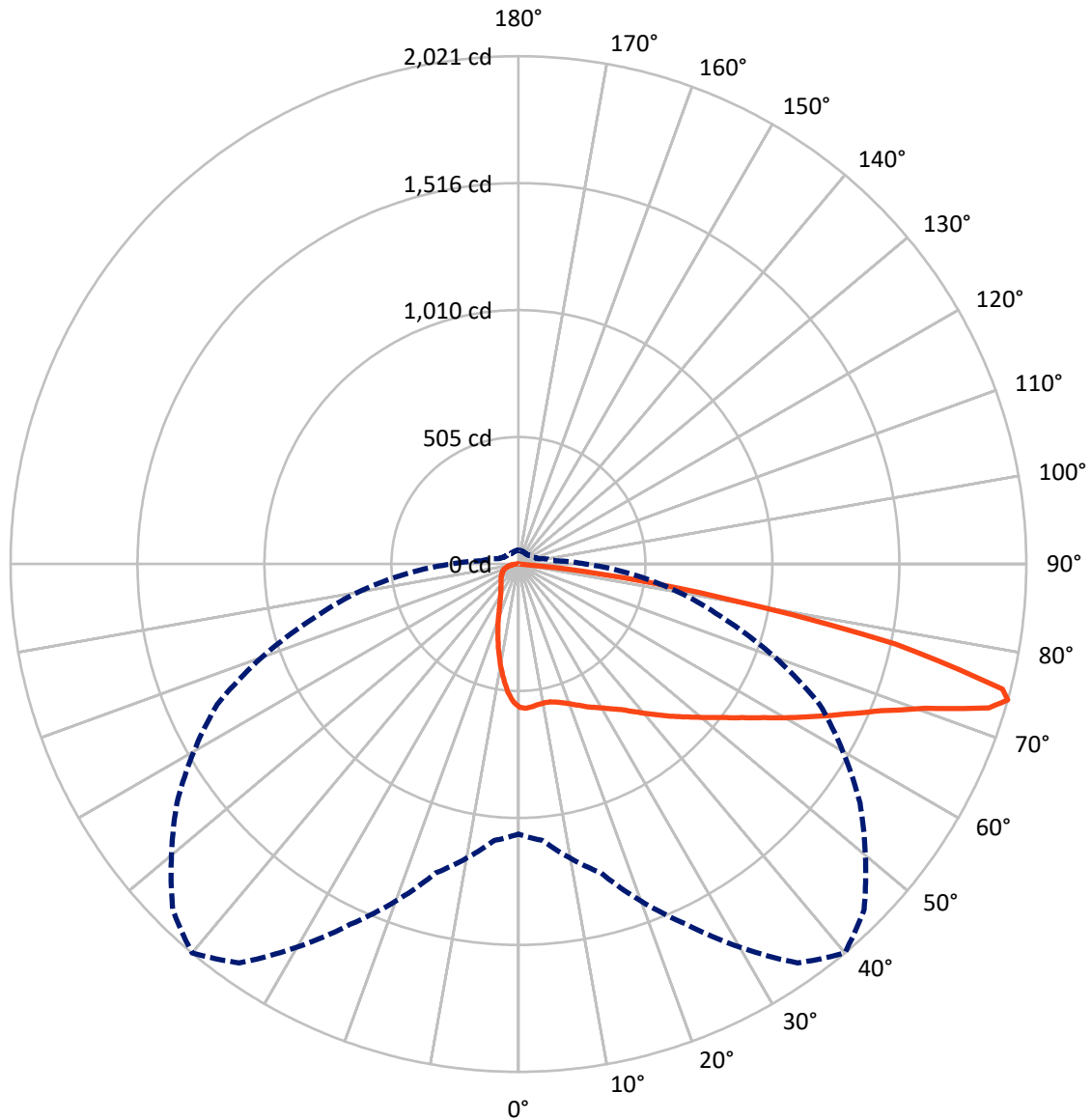
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 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	476.0	0.0	476.0
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	2577.0	0.0	2577.0
	% Fixture	84.4	0.0	84.4
Total	Lumens	3053.0	0.0	3053.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	1.6
10°-20°	129.6	4.2
20°-30°	198.7	6.5
30°-40°	287.0	9.4
40°-50°	412.9	13.5
50°-60°	570.1	18.7
60°-70°	718.8	23.5
70°-80°	623.3	20.4
80°-90°	62.4	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°	3053.0	100.0
0°-180°	3053.0	100.0



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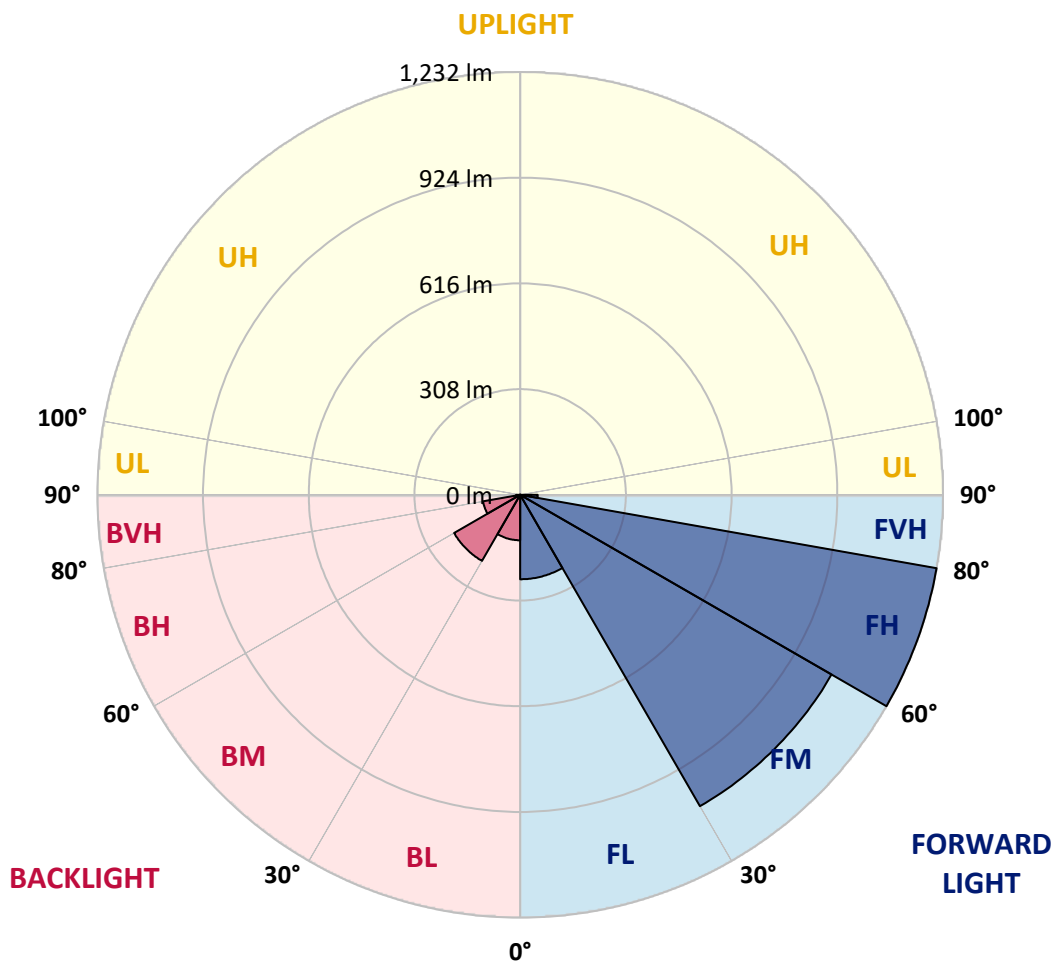
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	246.1	8.1			
FM	(30°-60°)	1047.7	34.3			
FH	(60°-80°)	1232.2	40.4			G1/1800
FVH	(80°-90°)	51.0	1.7			G1/100
BL	(0°-30°)	132.5	4.3	B1/500		
BM	(30°-60°)	222.3	7.3	B1/1000		
BH	(60°-80°)	109.9	3.6	B0/110		G0/110
BVH	(80°-90°)	11.4	0.4			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9
2.5°	577.2	576.7	578.1	577.2	575.8	574.9	574.5	571.7	570.8	568.1	564.4
5°	574.9	574.9	574.9	574.0	571.3	570.3	569.4	565.3	562.6	558.0	551.1
7.5°	567.1	568.5	568.1	567.6	565.3	564.4	563.0	558.0	554.3	547.5	538.8
10°	559.8	559.8	560.3	562.1	561.2	561.6	561.2	555.7	550.7	542.0	531.0
12.5°	549.3	551.1	553.9	558.9	561.2	563.0	563.0	558.9	553.4	542.9	530.1
15°	542.9	545.2	552.0	561.2	566.7	569.9	570.8	565.8	558.9	548.4	534.2
17.5°	540.1	542.9	555.7	568.5	578.1	580.9	581.3	575.8	568.5	555.7	539.2
20°	542.9	546.1	563.0	580.4	591.9	594.1	595.1	587.3	578.1	565.8	544.2
22.5°	553.4	558.0	576.7	595.5	607.4	610.6	609.7	598.7	589.6	576.3	550.7
25°	576.3	579.0	596.0	616.1	625.3	628.9	626.6	614.3	602.4	589.1	559.8
27.5°	602.8	606.5	624.4	639.5	645.4	646.3	644.0	631.2	617.9	607.0	574.0
30°	634.9	638.1	652.7	664.2	664.6	665.1	663.7	649.1	638.1	629.4	594.6
32.5°	668.8	669.2	684.3	689.8	686.1	687.5	686.1	670.1	662.3	659.6	621.6
35°	699.9	700.3	715.9	717.7	711.8	712.2	715.0	696.2	696.2	702.6	661.9
37.5°	729.6	731.0	744.7	742.9	740.6	744.7	748.4	732.4	741.5	759.8	710.9
40°	752.1	755.3	773.6	772.7	777.7	781.8	785.0	776.8	791.4	827.1	771.3
42.5°	766.7	773.1	799.2	805.6	814.3	821.6	827.1	826.7	852.3	901.7	835.4
45°	781.8	788.2	823.0	838.6	853.2	864.7	875.2	880.7	921.4	980.5	910.0
47.5°	800.1	805.6	844.5	875.2	894.0	909.5	928.3	940.2	991.9	1060.6	979.1
50°	828.0	831.7	866.5	914.1	937.9	959.4	982.8	1007.0	1067.9	1142.5	1039.5
52.5°	864.2	866.5	892.1	953.5	991.5	1014.3	1049.1	1081.2	1145.3	1216.7	1089.0
55°	905.4	903.6	923.3	1000.6	1045.0	1079.3	1122.4	1154.9	1226.7	1281.2	1128.3
57.5°	946.6	945.2	960.8	1045.9	1112.8	1153.0	1197.4	1231.8	1301.3	1341.6	1156.7
60°	986.0	980.9	1002.9	1099.0	1194.7	1240.9	1280.7	1312.3	1371.8	1385.1	1171.8
62.5°	1020.8	1020.8	1052.8	1164.5	1292.6	1334.3	1365.9	1386.9	1439.1	1417.2	1165.9
65°	1052.8	1056.9	1102.7	1237.7	1394.3	1436.8	1464.3	1472.5	1506.0	1418.5	1115.5
67.5°	1089.0	1095.4	1159.9	1323.3	1511.4	1556.8	1580.6	1577.8	1553.6	1397.5	1007.5
70°	1124.2	1134.7	1230.9	1433.6	1656.1	1717.4	1743.5	1689.5	1578.3	1280.7	836.7
72.5°	1149.8	1167.7	1289.0	1543.9	1863.4	1957.7	1947.2	1720.2	1462.5	1055.5	633.0
74°	1074.8	1104.5	1273.0	1581.9	1938.1	2020.9	1945.4	1659.3	1322.9	850.0	448.6
75°	987.3	1016.2	1191.9	1566.8	1952.2	1989.3	1851.1	1552.2	1186.5	658.7	293.0
77.5°	731.0	753.4	915.5	1235.4	1543.9	1533.0	1378.2	1051.9	584.5	198.7	123.6
80°	322.7	339.6	451.8	621.6	836.3	833.1	775.9	483.4	188.6	103.9	75.5
82.5°	97.5	97.0	130.0	181.3	317.7	323.6	275.1	166.6	90.2	43.0	36.6
85°	0.5	0.5	0.5	0.5	1.4	11.9	10.1	32.0	16.5	7.8	13.3
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	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°	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9	569.9
2.5°	562.1	561.6	560.3	557.1	554.8	547.9	550.2	545.6	545.2	544.2	543.8
5°	547.9	546.1	540.6	534.2	526.9	515.4	511.7	504.9	500.8	499.4	500.3
7.5°	533.3	529.1	518.6	504.9	490.2	473.3	460.9	451.3	444.5	442.2	439.0
10°	524.1	517.2	499.4	476.5	452.7	428.9	408.3	394.1	383.6	375.3	375.3
12.5°	520.9	511.7	485.7	452.2	417.9	384.0	354.3	335.5	317.7	309.0	307.6
15°	522.7	509.9	474.2	430.3	384.5	340.6	303.9	276.9	260.0	249.5	253.1
17.5°	524.6	508.5	462.3	406.9	352.0	301.2	258.6	228.0	207.4	201.9	199.6
20°	526.9	505.8	447.2	381.8	318.6	263.2	218.3	187.2	171.7	164.8	164.8
22.5°	530.1	502.1	431.6	353.8	284.3	226.1	184.5	161.1	148.8	144.6	144.6
25°	534.6	499.8	415.6	325.9	251.8	196.8	162.0	143.7	137.3	134.6	134.1
27.5°	543.3	500.3	400.1	297.5	219.7	172.1	146.0	134.1	129.1	127.7	127.3
30°	556.6	504.9	383.6	267.3	191.3	153.3	135.0	126.8	123.6	122.7	122.7
32.5°	574.9	513.1	369.9	240.3	170.3	138.2	125.9	120.4	118.6	117.6	118.1
35°	603.3	527.3	353.4	215.6	150.6	127.7	118.6	114.4	113.1	113.1	113.5
37.5°	640.4	549.3	337.4	192.7	137.3	118.6	111.7	109.4	108.0	108.9	109.4
40°	687.1	575.4	322.2	172.1	126.3	111.2	105.7	103.9	103.4	104.4	105.3
42.5°	737.4	607.0	308.5	155.2	117.6	105.3	100.7	99.8	99.3	99.8	101.2
45°	796.0	643.1	297.1	142.4	111.2	100.2	96.1	95.2	94.8	95.7	96.6
47.5°	850.0	675.6	287.9	133.7	105.7	96.6	92.5	91.1	91.1	91.1	92.0
50°	894.0	701.3	282.4	127.7	101.2	92.5	88.8	87.4	87.0	86.5	87.0
52.5°	932.0	720.5	280.6	124.0	97.5	88.8	85.1	84.2	83.3	82.4	82.9
55°	957.1	730.1	276.9	120.8	94.3	84.7	81.5	80.6	79.6	78.3	78.3
57.5°	971.8	729.2	268.7	119.0	92.5	81.0	77.8	77.8	76.9	74.6	75.1
60°	973.1	713.2	248.6	116.7	91.1	77.4	73.7	74.6	74.6	72.8	72.8
62.5°	949.8	671.0	209.6	110.8	89.3	74.6	70.5	72.8	73.7	71.9	71.9
65°	877.9	571.7	168.4	102.1	84.7	71.4	66.8	71.4	74.2	72.8	72.3
67.5°	740.2	452.7	139.2	92.5	79.6	67.3	63.2	69.1	72.8	72.8	72.3
70°	594.1	343.8	114.4	81.9	71.9	62.3	59.0	64.1	67.3	68.2	68.2
72.5°	409.2	210.1	92.9	70.5	63.2	56.3	53.6	56.8	58.6	60.4	60.0
74°	264.1	147.4	81.5	64.1	57.7	51.7	50.4	51.7	52.6	54.5	54.9
75°	176.7	120.4	76.0	59.5	54.5	48.5	47.6	49.0	49.9	51.3	51.3
77.5°	101.6	86.1	61.3	49.4	45.3	41.7	41.2	41.7	43.0	44.4	43.9
80°	70.5	65.5	48.5	38.4	35.7	33.9	34.3	34.8	37.1	37.5	37.1
82.5°	42.6	47.1	34.3	28.8	27.0	26.5	27.9	28.8	30.7	31.1	30.7
85°	16.9	22.4	16.9	16.0	17.9	19.7	22.0	23.3	24.3	24.3	24.3
87.5°	0.0	3.2	4.1	6.4	10.1	11.9	15.6	16.9	17.9	17.4	16.9
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)