

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: P401136

Luminaire Tested: **ENT-SA1B-740-U-SL4**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401136
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-740-U-SL4
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 3250 lumens
Efficiency: N/A
Efficacy: 128.0 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

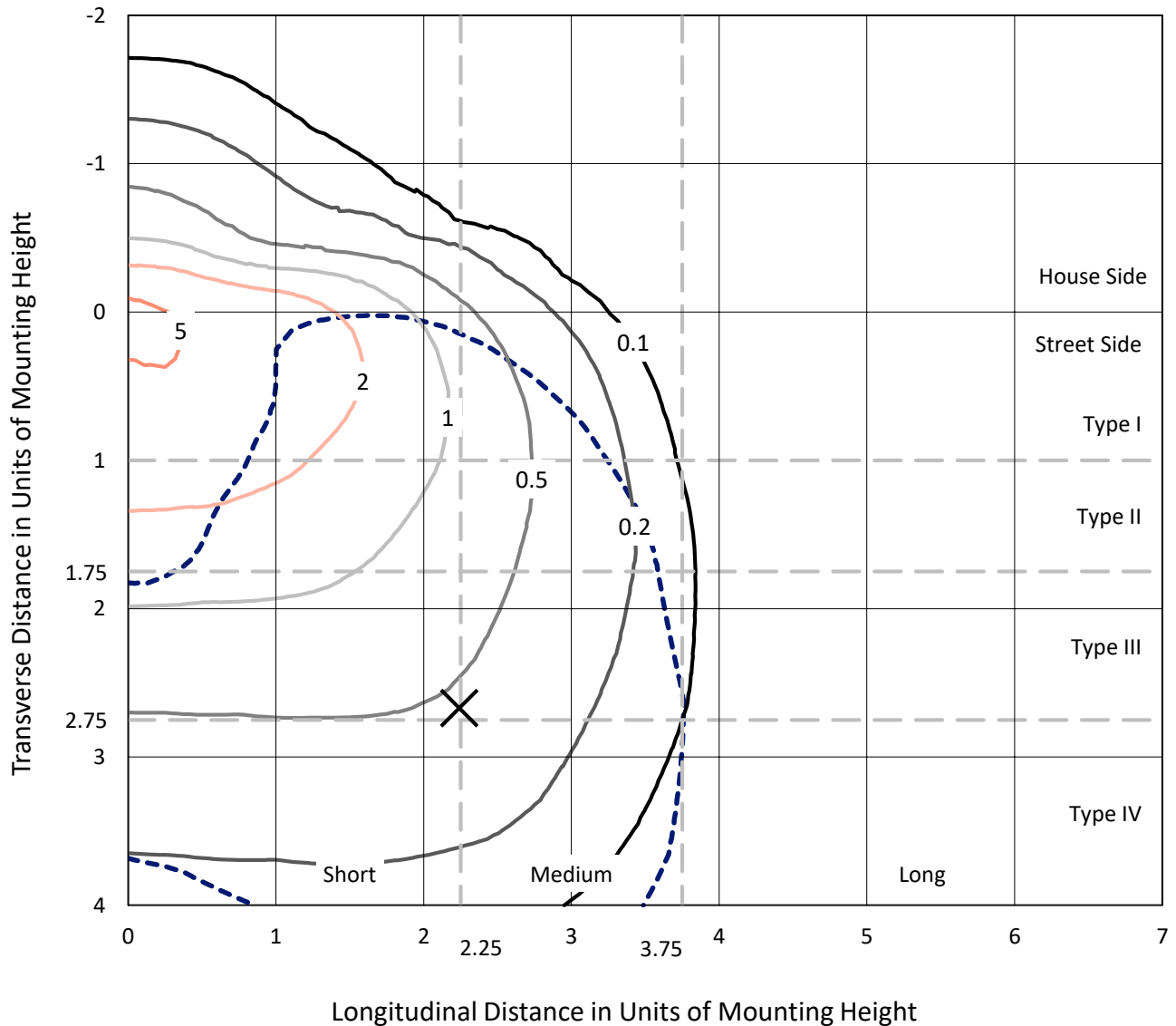
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401136
 CATALOG NUMBER: ENT-SA1B-740-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

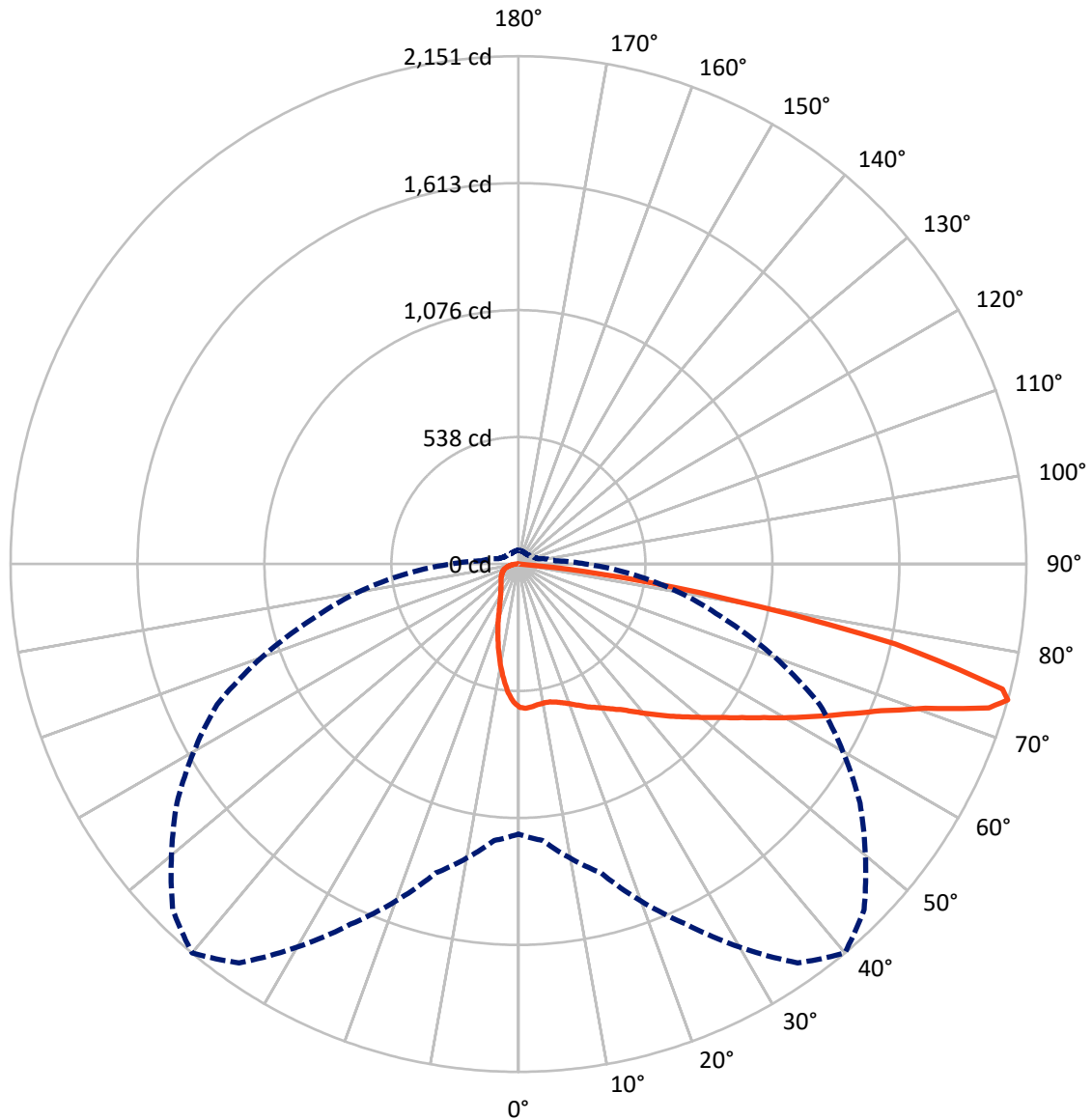
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401136
CATALOG NUMBER: ENT-SA1B-740-U-SL4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P401136

CATALOG NUMBER: ENT-SA1B-740-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	506.7	0.0	506.7
	% Fixture	15.6	0.0	15.6
Street Side	Lumens	2743.3	0.0	2743.3
	% Fixture	84.4	0.0	84.4
Total	Lumens	3250.0	0.0	3250.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	1.6
10°-20°	137.9	4.2
20°-30°	211.5	6.5
30°-40°	305.5	9.4
40°-50°	439.5	13.5
50°-60°	606.9	18.7
60°-70°	765.1	23.5
70°-80°	663.5	20.4
80°-90°	66.4	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°	3250.0	100.0
0°-180°	3250.0	100.0



REPORT NUMBER: P401136

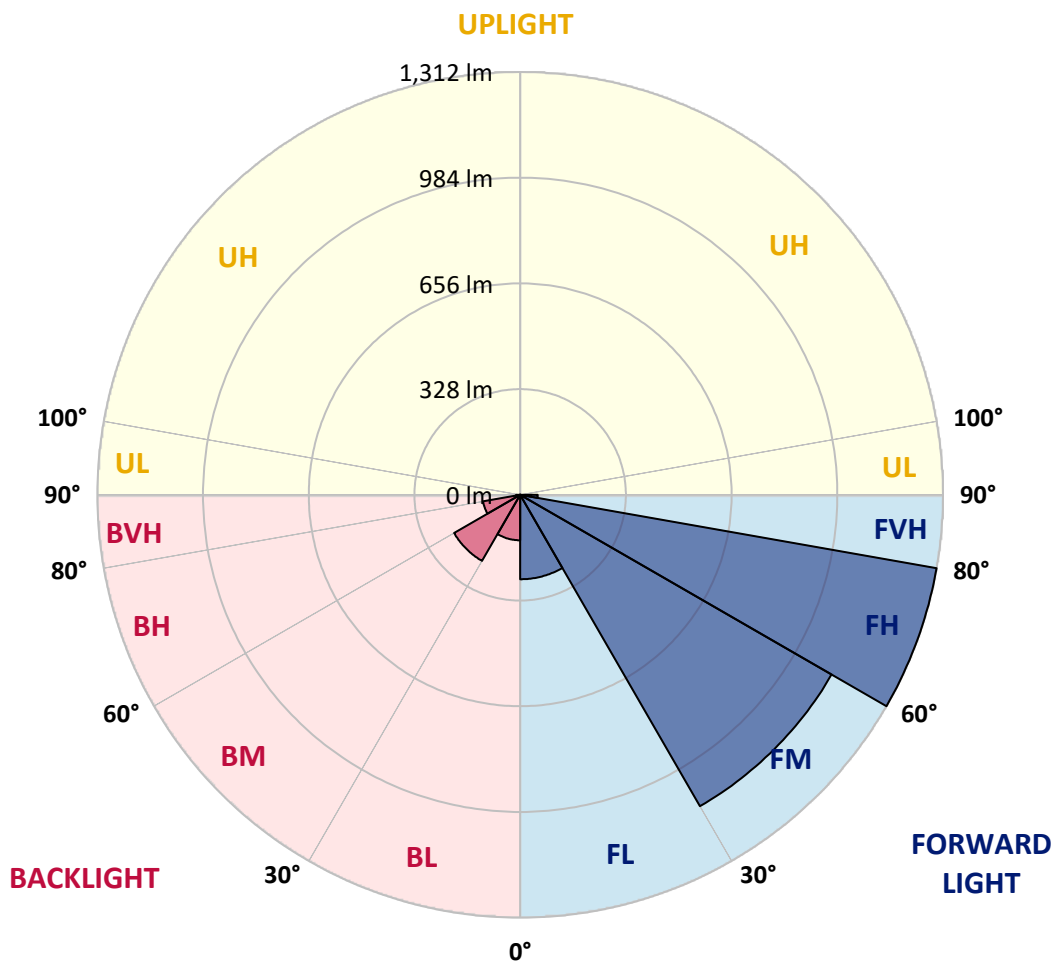
CATALOG NUMBER: ENT-SA1B-740-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	262.0	8.1			
FM	(30°-60°)	1115.3	34.3			
FH	(60°-80°)	1311.7	40.4			G1/1800
FVH	(80°-90°)	54.3	1.7			G1/100
BL	(0°-30°)	141.0	4.3	B1/500		
BM	(30°-60°)	236.6	7.3	B1/1000		
BH	(60°-80°)	117.0	3.6	B1/500		G1/500
BVH	(80°-90°)	12.1	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





REPORT NUMBER: P401136

CATALOG NUMBER: ENT-SA1B-740-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	614.5	614.0	615.4	614.5	613.0	612.0	611.5	608.6	607.6	604.7	600.8
5°	612.0	612.0	612.0	611.0	608.1	607.1	606.2	601.8	598.9	594.0	586.7
7.5°	603.7	605.2	604.7	604.2	601.8	600.8	599.3	594.0	590.1	582.8	573.5
10°	595.9	595.9	596.4	598.4	597.4	597.9	597.4	591.5	586.2	576.9	565.2
12.5°	584.7	586.7	589.6	595.0	597.4	599.3	599.3	595.0	589.1	577.9	564.3
15°	577.9	580.3	587.7	597.4	603.2	606.7	607.6	602.3	595.0	583.8	568.6
17.5°	575.0	577.9	591.5	605.2	615.4	618.3	618.8	613.0	605.2	591.5	574.0
20°	577.9	581.3	599.3	617.9	630.0	632.5	633.5	625.2	615.4	602.3	579.4
22.5°	589.1	594.0	614.0	633.9	646.6	650.0	649.0	637.4	627.6	613.5	586.2
25°	613.5	616.4	634.4	655.9	665.6	669.5	667.1	653.9	641.3	627.1	595.9
27.5°	641.7	645.6	664.6	680.7	687.1	688.0	685.6	671.9	657.8	646.1	611.0
30°	675.8	679.3	694.9	707.0	707.5	708.0	706.5	691.0	679.3	670.0	633.0
32.5°	711.9	712.4	728.5	734.3	730.4	731.9	730.4	713.4	705.1	702.2	661.7
35°	745.0	745.5	762.1	764.0	757.7	758.2	761.1	741.1	741.1	748.0	704.6
37.5°	776.7	778.2	792.8	790.8	788.4	792.8	796.7	779.6	789.4	808.9	756.7
40°	800.6	804.0	823.5	822.5	827.9	832.3	835.7	826.9	842.5	880.5	821.1
42.5°	816.2	823.0	850.8	857.6	866.9	874.7	880.5	880.0	907.3	959.9	889.3
45°	832.3	839.1	876.1	892.7	908.3	920.5	931.7	937.5	980.9	1043.7	968.7
47.5°	851.8	857.6	899.0	931.7	951.6	968.2	988.2	1000.9	1055.9	1129.0	1042.3
50°	881.5	885.4	922.4	973.1	998.4	1021.3	1046.2	1072.0	1136.8	1216.2	1106.6
52.5°	920.0	922.4	949.7	1015.0	1055.4	1079.8	1116.8	1150.9	1219.2	1295.2	1159.2
55°	963.8	961.9	982.8	1065.2	1112.4	1149.0	1194.8	1229.4	1305.9	1363.9	1201.1
57.5°	1007.7	1006.2	1022.8	1113.4	1184.6	1227.4	1274.7	1311.3	1385.3	1428.2	1231.3
60°	1049.6	1044.2	1067.6	1169.9	1271.8	1321.0	1363.4	1397.0	1460.4	1474.5	1247.4
62.5°	1086.6	1086.6	1120.7	1239.6	1376.1	1420.4	1454.0	1476.4	1532.0	1508.6	1241.1
65°	1120.7	1125.1	1173.8	1317.6	1484.2	1529.5	1558.8	1567.6	1603.1	1510.1	1187.5
67.5°	1159.2	1166.0	1234.7	1408.7	1609.0	1657.2	1682.6	1679.6	1653.8	1487.6	1072.5
70°	1196.7	1207.9	1310.3	1526.1	1763.0	1828.2	1856.0	1798.5	1680.1	1363.4	890.7
72.5°	1224.0	1243.0	1372.2	1643.6	1983.7	2084.1	2072.9	1831.2	1556.8	1123.7	673.9
74°	1144.1	1175.8	1355.1	1684.0	2063.1	2151.3	2070.9	1766.4	1408.2	904.9	477.5
75°	1051.0	1081.7	1268.9	1667.9	2078.2	2117.7	1970.5	1652.3	1263.0	701.2	311.9
77.5°	778.2	802.1	974.5	1315.1	1643.6	1631.9	1467.2	1119.8	622.2	211.5	131.6
80°	343.5	361.6	480.9	661.7	890.2	886.8	825.9	514.6	200.8	110.6	80.4
82.5°	103.8	103.3	138.4	193.0	338.2	344.5	292.9	177.4	96.0	45.8	39.0
85°	0.5	0.5	0.5	0.5	1.5	12.7	10.7	34.1	17.5	8.3	14.1
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



REPORT NUMBER: P401136

CATALOG NUMBER: ENT-SA1B-740-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7	606.7
2.5°	598.4	597.9	596.4	593.0	590.6	583.3	585.7	580.8	580.3	579.4	578.9
5°	583.3	581.3	575.5	568.6	560.9	548.7	544.8	537.5	533.1	531.6	532.6
7.5°	567.7	563.3	552.1	537.5	521.9	503.8	490.7	480.5	473.1	470.7	467.3
10°	557.9	550.6	531.6	507.3	481.9	456.6	434.6	419.5	408.3	399.6	399.6
12.5°	554.5	544.8	517.0	481.4	444.9	408.8	377.1	357.2	338.2	328.9	327.4
15°	556.5	542.8	504.8	458.0	409.3	362.5	323.5	294.8	276.8	265.6	269.5
17.5°	558.4	541.4	492.1	433.2	374.7	320.6	275.3	242.7	220.7	214.9	212.5
20°	560.9	538.4	476.1	406.4	339.1	280.2	232.4	199.3	182.7	175.4	175.4
22.5°	564.3	534.5	459.5	376.7	302.6	240.7	196.4	171.5	158.4	154.0	154.0
25°	569.1	532.1	442.4	346.9	268.0	209.5	172.5	153.0	146.2	143.3	142.8
27.5°	578.4	532.6	425.9	316.7	233.9	183.2	155.4	142.8	137.4	135.9	135.5
30°	592.5	537.5	408.3	284.6	203.7	163.2	143.7	135.0	131.6	130.6	130.6
32.5°	612.0	546.2	393.7	255.8	181.3	147.2	134.0	128.2	126.2	125.2	125.7
35°	642.2	561.3	376.2	229.5	160.3	135.9	126.2	121.8	120.4	120.4	120.8
37.5°	681.7	584.7	359.1	205.1	146.2	126.2	118.9	116.5	115.0	116.0	116.5
40°	731.4	612.5	343.0	183.2	134.5	118.4	112.6	110.6	110.1	111.1	112.1
42.5°	785.0	646.1	328.4	165.2	125.2	112.1	107.2	106.2	105.7	106.2	107.7
45°	847.4	684.6	316.2	151.5	118.4	106.7	102.3	101.4	100.9	101.8	102.8
47.5°	904.9	719.2	306.5	142.3	112.6	102.8	98.4	97.0	97.0	97.0	97.9
50°	951.6	746.5	300.6	135.9	107.7	98.4	94.5	93.1	92.6	92.1	92.6
52.5°	992.1	767.0	298.7	132.1	103.8	94.5	90.6	89.7	88.7	87.7	88.2
55°	1018.9	777.2	294.8	128.6	100.4	90.1	86.7	85.8	84.8	83.3	83.3
57.5°	1034.5	776.2	286.0	126.7	98.4	86.2	82.8	82.8	81.9	79.4	79.9
60°	1035.9	759.2	264.6	124.3	97.0	82.3	78.5	79.4	79.4	77.5	77.5
62.5°	1011.1	714.3	223.2	117.9	95.0	79.4	75.0	77.5	78.5	76.5	76.5
65°	934.6	608.6	179.3	108.7	90.1	76.0	71.1	76.0	78.9	77.5	77.0
67.5°	787.9	481.9	148.1	98.4	84.8	71.6	67.2	73.6	77.5	77.5	77.0
70°	632.5	365.9	121.8	87.2	76.5	66.3	62.9	68.2	71.6	72.6	72.6
72.5°	435.6	223.7	98.9	75.0	67.2	59.9	57.0	60.4	62.4	64.3	63.8
74°	281.2	156.9	86.7	68.2	61.4	55.1	53.6	55.1	56.0	58.0	58.5
75°	188.1	128.2	80.9	63.3	58.0	51.7	50.7	52.1	53.1	54.6	54.6
77.5°	108.2	91.6	65.3	52.6	48.2	44.3	43.9	44.3	45.8	47.3	46.8
80°	75.0	69.7	51.7	40.9	38.0	36.1	36.5	37.0	39.5	40.0	39.5
82.5°	45.3	50.2	36.5	30.7	28.7	28.3	29.7	30.7	32.6	33.1	32.6
85°	18.0	23.9	18.0	17.1	19.0	21.0	23.4	24.9	25.8	25.8	25.8
87.5°	0.0	3.4	4.4	6.8	10.7	12.7	16.6	18.0	19.0	18.5	18.0
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)