

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: P401382

Luminaire Tested: **ENV-SA1C-827-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401382  
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: ENV-SA1C-827-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 615mA 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: 3144 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

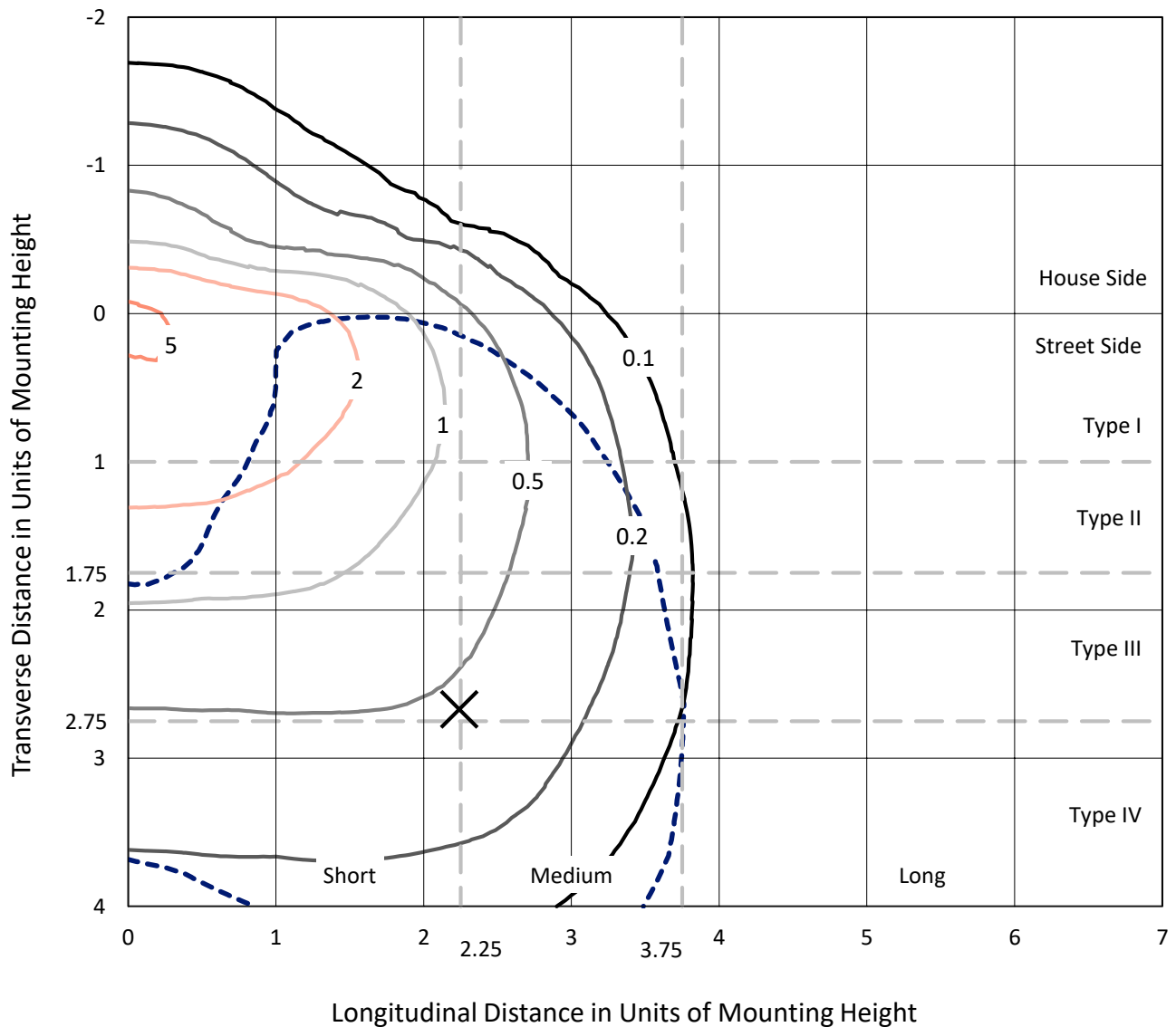
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401382  
 CATALOG NUMBER: ENV-SA1C-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

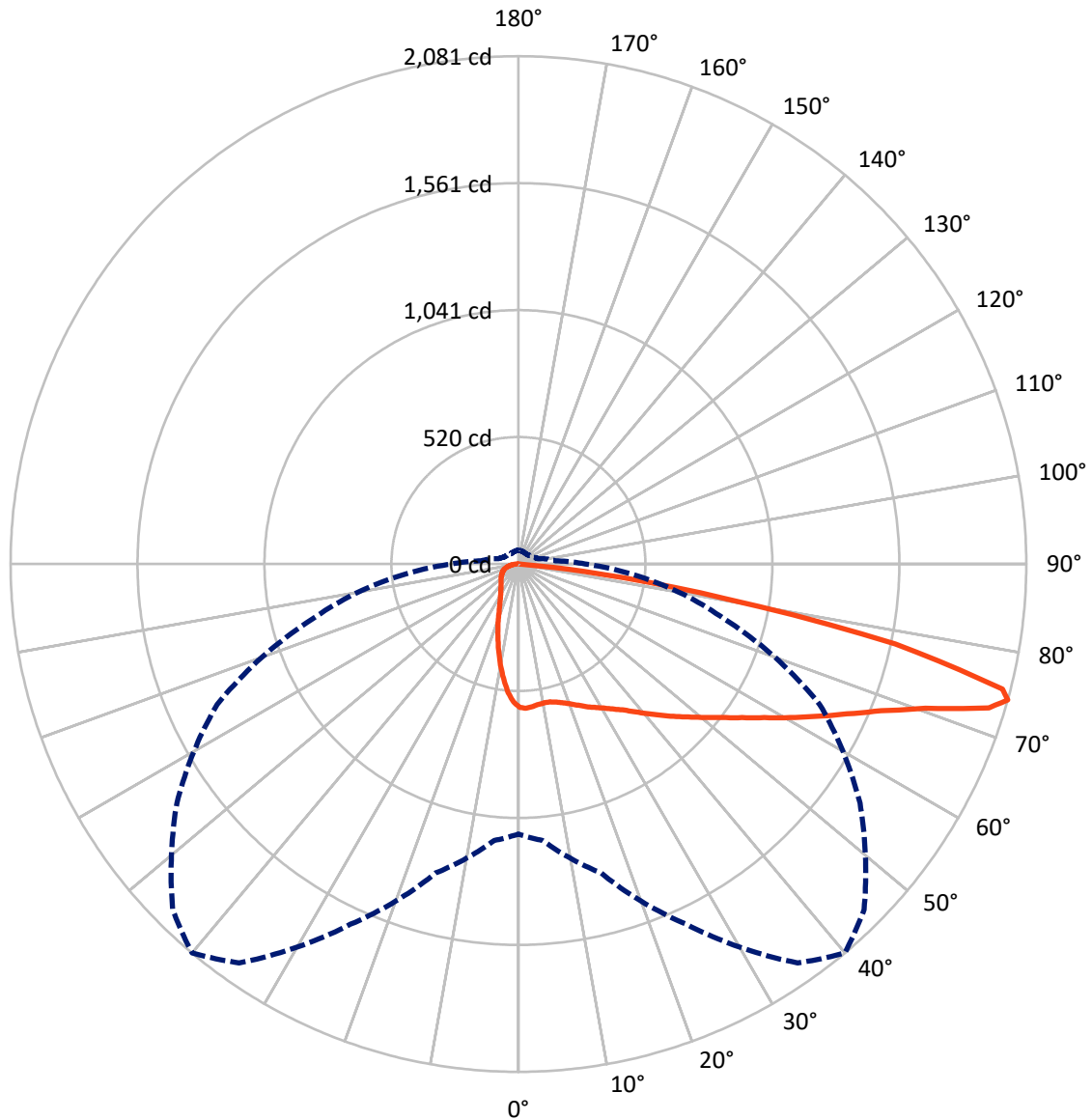
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401382  
CATALOG NUMBER: ENV-SA1C-827-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P401382

CATALOG NUMBER: ENV-SA1C-827-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	490.2	0.0	490.2
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	2653.8	0.0	2653.8
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	3144.0	0.0	3144.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.8	1.6
10°-20°	133.4	4.2
20°-30°	204.6	6.5
30°-40°	295.5	9.4
40°-50°	425.2	13.5
50°-60°	587.1	18.7
60°-70°	740.2	23.5
70°-80°	641.9	20.4
80°-90°	64.3	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°	3144.0	100.0
0°-180°	3144.0	100.0



REPORT NUMBER: P401382

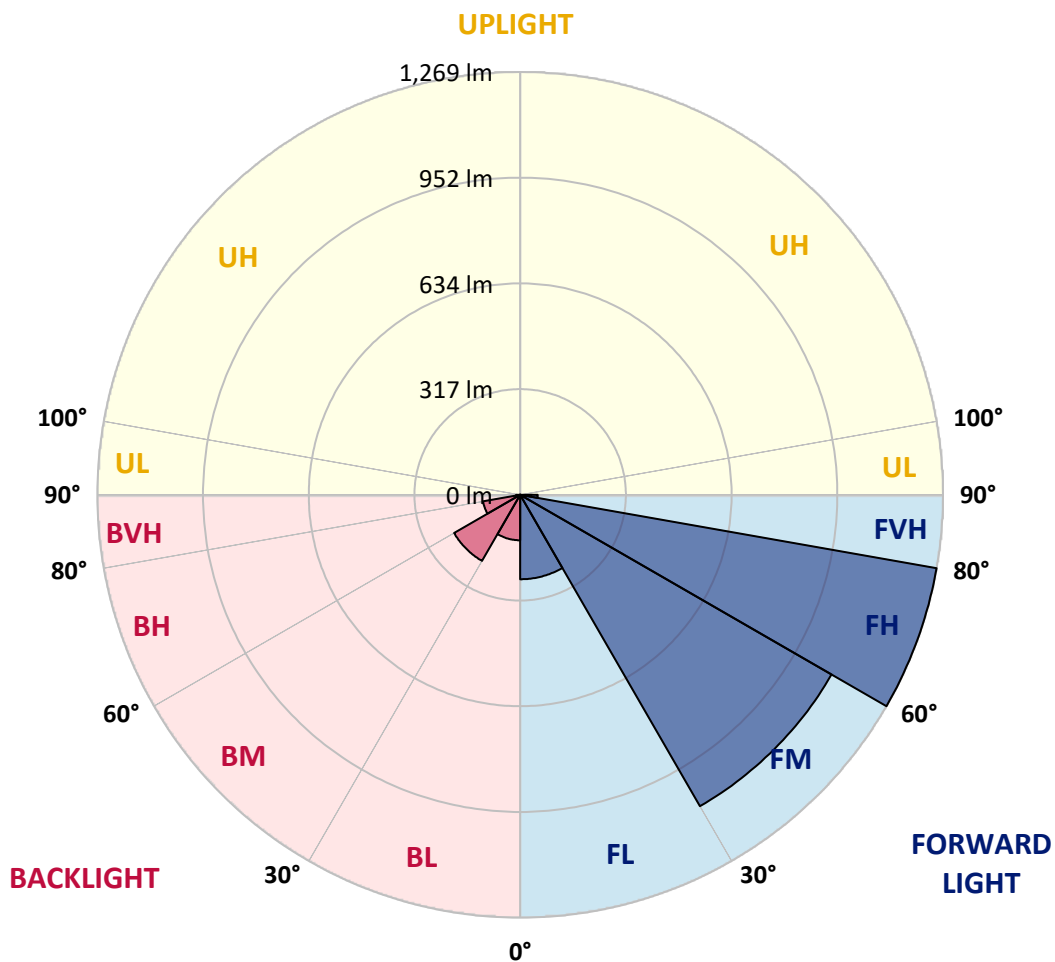
CATALOG NUMBER: ENV-SA1C-827-U-SL4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.5	8.1			
FM	(30°-60°)	1078.9	34.3			
FH	(60°-80°)	1268.9	40.4			G1/1800
FVH	(80°-90°)	52.5	1.7			G1/100
BL	(0°-30°)	136.4	4.3	B1/500		
BM	(30°-60°)	228.9	7.3	B1/1000		
BH	(60°-80°)	113.1	3.6	B1/500		G1/500
BVH	(80°-90°)	11.7	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: P401382

CATALOG NUMBER: ENV-SA1C-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9
2.5°	594.4	593.9	595.4	594.4	593.0	592.1	591.6	588.8	587.8	585.0	581.2
5°	592.1	592.1	592.1	591.1	588.3	587.3	586.4	582.2	579.3	574.6	567.5
7.5°	584.0	585.5	585.0	584.5	582.2	581.2	579.8	574.6	570.8	563.8	554.8
10°	576.5	576.5	577.0	578.9	577.9	578.4	577.9	572.3	567.1	558.1	546.8
12.5°	565.7	567.5	570.4	575.6	577.9	579.8	579.8	575.6	569.9	559.1	545.9
15°	559.1	561.4	568.5	577.9	583.6	586.9	587.8	582.6	575.6	564.7	550.1
17.5°	556.2	559.1	572.3	585.5	595.4	598.2	598.7	593.0	585.5	572.3	555.3
20°	559.1	562.4	579.8	597.7	609.5	611.9	612.8	604.8	595.4	582.6	560.5
22.5°	569.9	574.6	593.9	613.3	625.5	628.8	627.9	616.6	607.1	593.5	567.1
25°	593.5	596.3	613.7	634.5	643.9	647.7	645.3	632.6	620.3	606.7	576.5
27.5°	620.8	624.6	643.0	658.5	664.6	665.6	663.2	650.0	636.4	625.1	591.1
30°	653.8	657.1	672.2	684.0	684.4	684.9	683.5	668.4	657.1	648.1	612.3
32.5°	688.7	689.2	704.7	710.4	706.6	708.0	706.6	690.1	682.1	679.3	640.1
35°	720.7	721.2	737.2	739.1	733.0	733.5	736.3	717.0	717.0	723.6	681.6
37.5°	751.4	752.8	766.9	765.0	762.7	766.9	770.7	754.2	763.6	782.5	732.1
40°	774.5	777.8	796.6	795.7	800.9	805.1	808.4	799.9	815.0	851.8	794.3
42.5°	789.6	796.2	823.0	829.6	838.6	846.1	851.8	851.3	877.7	928.6	860.3
45°	805.1	811.7	847.5	863.6	878.7	890.4	901.3	906.9	948.9	1009.7	937.1
47.5°	824.0	829.6	869.7	901.3	920.6	936.6	956.0	968.2	1021.5	1092.2	1008.3
50°	852.7	856.5	892.3	941.3	965.9	988.0	1012.1	1037.0	1099.7	1176.6	1070.5
52.5°	890.0	892.3	918.7	981.9	1021.0	1044.6	1080.4	1113.4	1179.4	1252.9	1121.4
55°	932.4	930.5	950.8	1030.4	1076.2	1111.5	1155.8	1189.3	1263.3	1319.4	1162.0
57.5°	974.8	973.4	989.4	1077.1	1145.9	1187.4	1233.1	1268.5	1340.1	1381.6	1191.2
60°	1015.4	1010.2	1032.8	1131.8	1230.3	1277.9	1318.9	1351.4	1412.7	1426.4	1206.7
62.5°	1051.2	1051.2	1084.2	1199.2	1331.2	1374.1	1406.6	1428.3	1482.0	1459.4	1200.6
65°	1084.2	1088.4	1135.6	1274.6	1435.8	1479.7	1507.9	1516.4	1550.8	1460.8	1148.8
67.5°	1121.4	1128.0	1194.5	1362.8	1556.5	1603.2	1627.7	1624.8	1599.9	1439.1	1037.5
70°	1157.7	1168.6	1267.5	1476.4	1705.5	1768.6	1795.5	1739.9	1625.3	1318.9	861.7
72.5°	1184.1	1202.5	1327.4	1590.0	1919.0	2016.1	2005.3	1771.4	1506.1	1087.0	651.9
74°	1106.8	1137.4	1310.9	1629.1	1995.8	2081.1	2003.4	1708.8	1362.3	875.4	462.0
75°	1016.8	1046.5	1227.5	1613.5	2010.4	2048.6	1906.3	1598.4	1221.8	678.3	301.7
77.5°	752.8	775.9	942.8	1272.3	1590.0	1578.7	1419.3	1083.2	602.0	204.6	127.3
80°	332.3	349.8	465.3	640.1	861.2	857.9	799.0	497.8	194.2	107.0	77.8
82.5°	100.4	99.9	133.9	186.7	327.1	333.3	283.3	171.6	92.9	44.3	37.7
85°	0.5	0.5	0.5	0.5	1.4	12.3	10.4	33.0	17.0	8.0	13.7
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: P401382

CATALOG NUMBER: ENV-SA1C-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9	586.9
2.5°	578.9	578.4	577.0	573.7	571.3	564.2	566.6	561.9	561.4	560.5	560.0
5°	564.2	562.4	556.7	550.1	542.6	530.8	527.0	519.9	515.7	514.3	515.2
7.5°	549.2	544.9	534.1	519.9	504.8	487.4	474.7	464.8	457.7	455.4	452.1
10°	539.7	532.7	514.3	490.7	466.2	441.7	420.5	405.9	395.0	386.5	386.5
12.5°	536.4	527.0	500.1	465.7	430.4	395.5	364.8	345.5	327.1	318.2	316.8
15°	538.3	525.1	488.3	443.1	396.0	350.7	313.0	285.2	267.7	256.9	260.7
17.5°	540.2	523.7	476.1	419.1	362.5	310.2	266.3	234.7	213.5	207.9	205.5
20°	542.6	520.9	460.5	393.1	328.1	271.0	224.8	192.8	176.8	169.7	169.7
22.5°	545.9	517.1	444.5	364.4	292.7	232.9	190.0	165.9	153.2	149.0	149.0
25°	550.6	514.7	428.0	335.6	259.3	202.7	166.9	148.0	141.4	138.6	138.1
27.5°	559.5	515.2	412.0	306.4	226.3	177.2	150.4	138.1	132.9	131.5	131.0
30°	573.2	519.9	395.0	275.3	197.0	157.9	139.1	130.6	127.3	126.3	126.3
32.5°	592.1	528.4	380.9	247.5	175.4	142.4	129.6	124.0	122.1	121.1	121.6
35°	621.3	543.0	363.9	222.0	155.1	131.5	122.1	117.8	116.4	116.4	116.9
37.5°	659.5	565.7	347.4	198.5	141.4	122.1	115.0	112.7	111.2	112.2	112.7
40°	707.5	592.5	331.9	177.2	130.1	114.5	108.9	107.0	106.5	107.5	108.4
42.5°	759.4	625.1	317.7	159.8	121.1	108.4	103.7	102.8	102.3	102.8	104.2
45°	819.7	662.3	305.9	146.6	114.5	103.2	99.0	98.0	97.6	98.5	99.5
47.5°	875.4	695.8	296.5	137.6	108.9	99.5	95.2	93.8	93.8	93.8	94.7
50°	920.6	722.2	290.8	131.5	104.2	95.2	91.4	90.0	89.6	89.1	89.6
52.5°	959.7	742.0	289.0	127.7	100.4	91.4	87.7	86.7	85.8	84.8	85.3
55°	985.7	751.9	285.2	124.4	97.1	87.2	83.9	83.0	82.0	80.6	80.6
57.5°	1000.7	750.9	276.7	122.6	95.2	83.4	80.1	80.1	79.2	76.8	77.3
60°	1002.2	734.4	256.0	120.2	93.8	79.7	75.9	76.8	76.8	74.9	74.9
62.5°	978.1	691.0	215.9	114.1	91.9	76.8	72.6	74.9	75.9	74.0	74.0
65°	904.1	588.8	173.5	105.1	87.2	73.5	68.8	73.5	76.4	74.9	74.5
67.5°	762.2	466.2	143.3	95.2	82.0	69.3	65.1	71.2	74.9	74.9	74.5
70°	611.9	354.0	117.8	84.4	74.0	64.1	60.8	66.0	69.3	70.2	70.2
72.5°	421.4	216.4	95.7	72.6	65.1	58.0	55.2	58.5	60.3	62.2	61.8
74°	272.0	151.8	83.9	66.0	59.4	53.3	51.9	53.3	54.2	56.1	56.6
75°	182.0	124.0	78.2	61.3	56.1	50.0	49.0	50.4	51.4	52.8	52.8
77.5°	104.6	88.6	63.2	50.9	46.7	42.9	42.4	42.9	44.3	45.7	45.3
80°	72.6	67.4	50.0	39.6	36.8	34.9	35.4	35.8	38.2	38.7	38.2
82.5°	43.8	48.6	35.4	29.7	27.8	27.3	28.8	29.7	31.6	32.1	31.6
85°	17.4	23.1	17.4	16.5	18.4	20.3	22.6	24.0	25.0	25.0	25.0
87.5°	0.0	3.3	4.2	6.6	10.4	12.3	16.0	17.4	18.4	17.9	17.4
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)