

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: P401749

Luminaire Tested: **ENV-SA1E-827-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401749  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1E-827-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3973 lumens  
Efficiency: N/A  
Efficacy: 69.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 57.2  
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

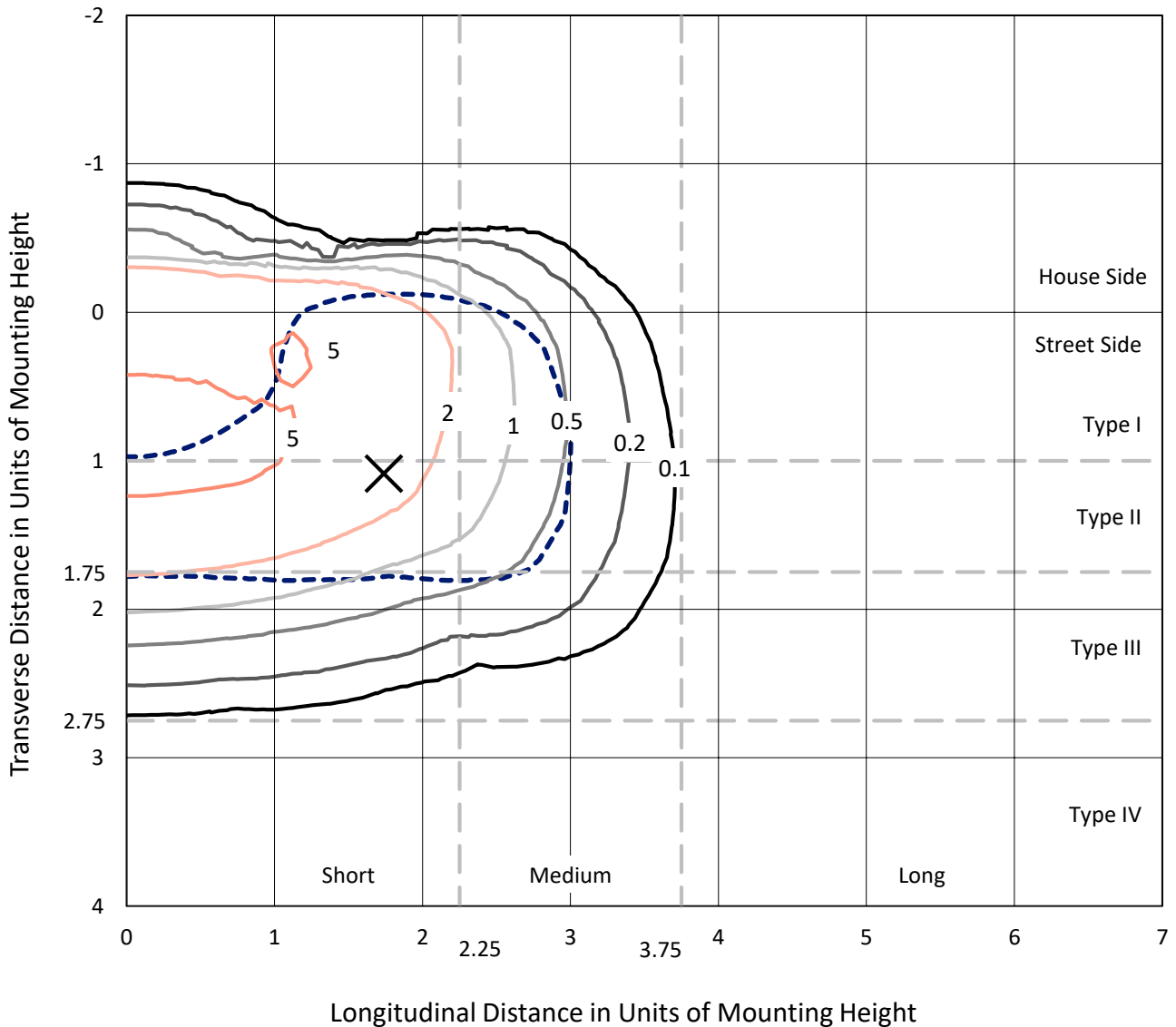


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

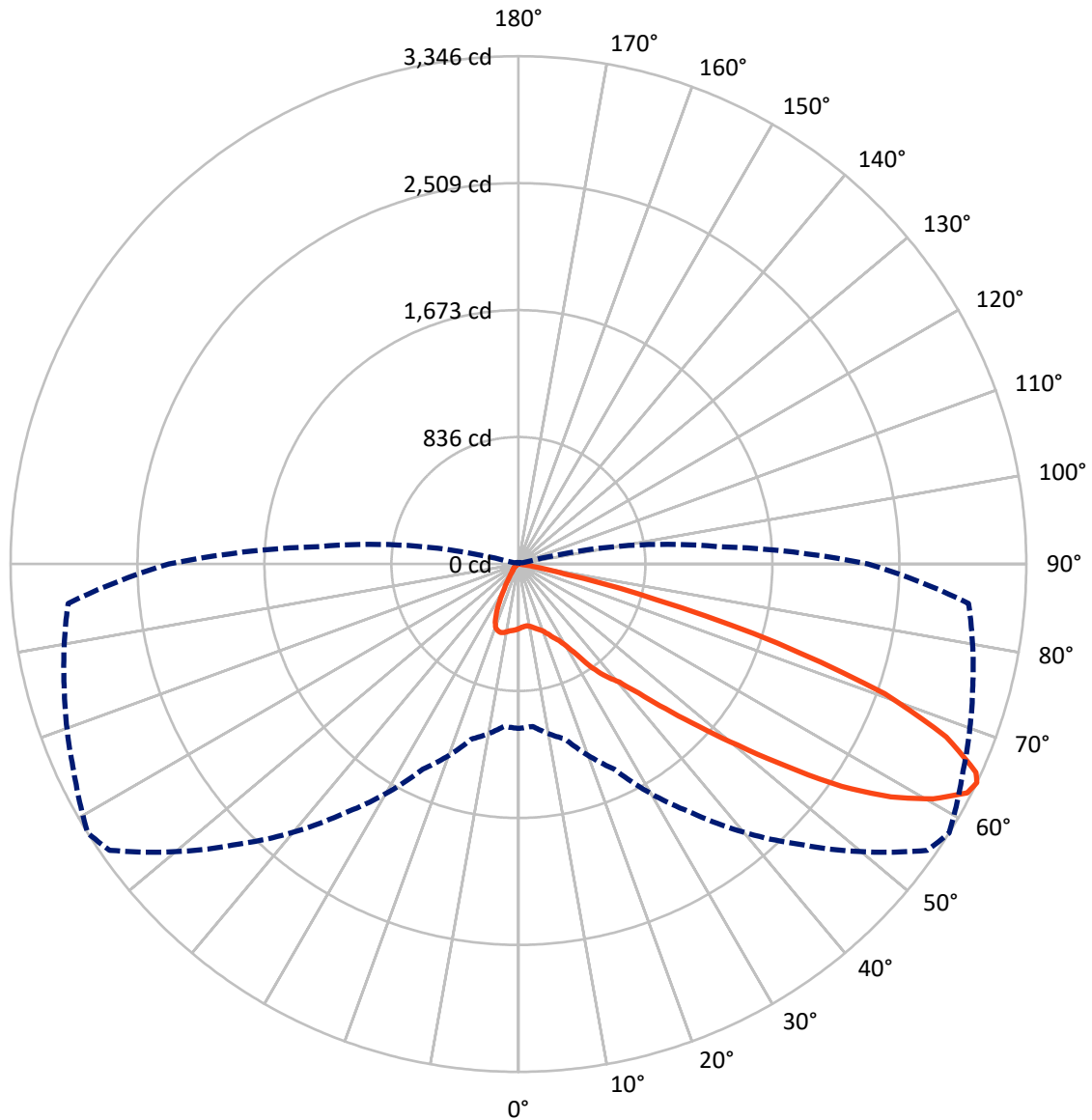


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	473.7	0.0	473.7
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	3499.3	0.0	3499.3
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	3973.0	0.0	3973.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.2	1.0
10°-20°	117.2	3.0
20°-30°	210.6	5.3
30°-40°	369.2	9.3
40°-50°	675.1	17.0
50°-60°	1154.9	29.1
60°-70°	1120.3	28.2
70°-80°	277.5	7.0
80°-90°	7.9	0.2
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°	3973.0	100.0
0°-180°	3973.0	100.0



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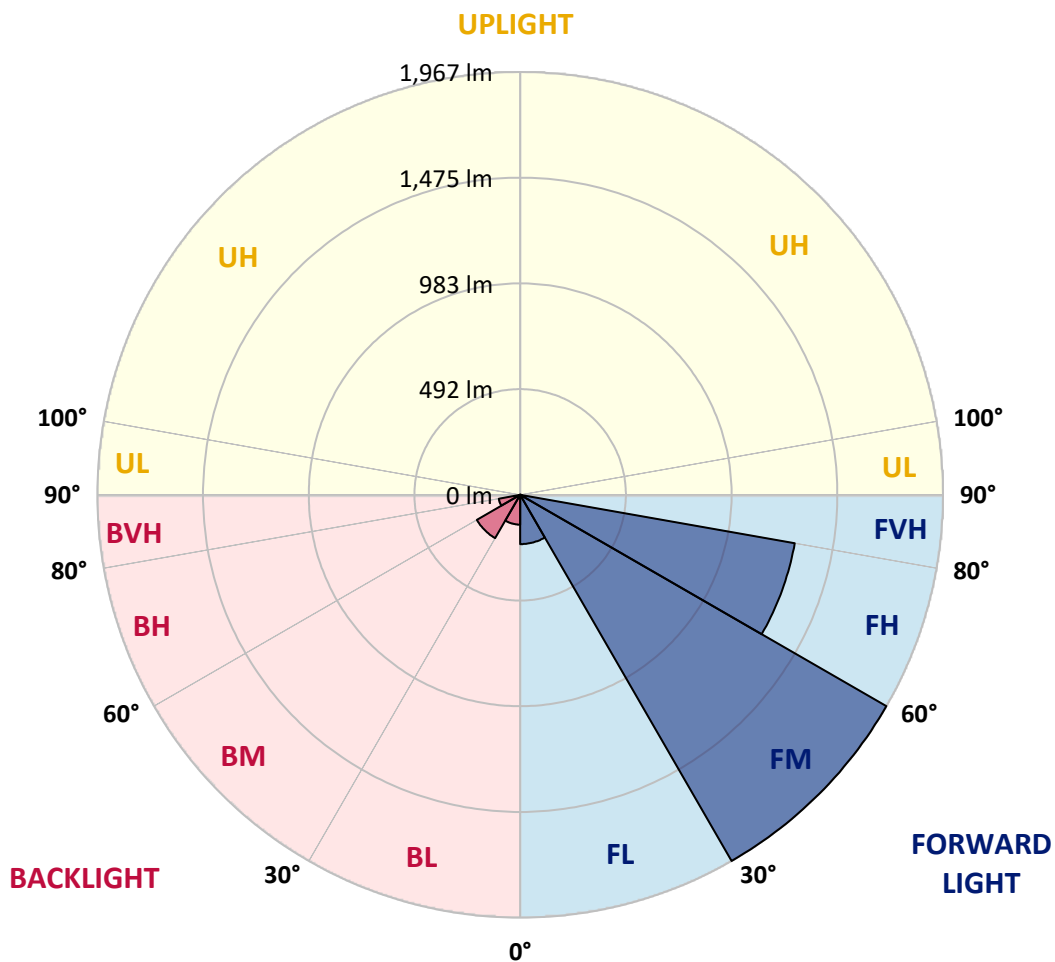
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	229.4	5.8			
FM	(30°-60°)	1966.6	49.5			
FH	(60°-80°)	1296.7	32.6			G1/1800
FVH	(80°-90°)	6.7	0.2			G0/10
BL	(0°-30°)	138.7	3.5	B1/500		
BM	(30°-60°)	232.6	5.9	B1/1000		
BH	(60°-80°)	101.1	2.5	B0/110		G0/110
BVH	(80°-90°)	1.2	0.0			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6
2.5°	407.9	407.9	409.4	410.1	412.3	414.5	417.5	418.2	419.7	423.4	424.8
5°	385.9	386.6	388.1	391.8	396.9	402.8	410.1	412.3	418.2	425.6	430.7
7.5°	377.1	377.8	380.0	384.4	391.0	399.8	408.7	411.6	419.7	431.5	438.8
10°	375.6	375.6	378.5	385.1	393.2	404.3	413.8	417.5	428.5	442.5	454.2
12.5°	375.6	375.6	379.3	387.4	396.9	410.9	424.1	429.2	441.7	459.4	474.1
15°	382.2	383.7	385.9	391.0	402.1	417.5	435.9	441.7	457.2	478.5	496.9
17.5°	429.2	427.8	420.4	413.8	411.6	424.8	446.9	455.0	477.8	505.0	524.8
20°	520.4	519.7	506.4	474.1	445.4	438.1	463.8	473.4	506.4	542.4	557.1
22.5°	630.6	634.3	613.7	570.4	511.6	474.1	488.8	502.0	544.6	588.0	596.8
25°	740.2	744.6	725.5	671.1	599.0	533.6	523.3	535.1	583.6	627.0	623.3
27.5°	869.5	865.8	846.7	785.0	701.2	613.7	569.6	571.8	609.3	657.8	646.1
30°	964.3	959.2	940.8	898.9	820.3	720.3	635.8	629.2	640.2	693.9	681.4
32.5°	1051.1	1054.7	1040.8	984.9	910.7	829.8	735.0	717.4	713.0	758.5	738.0
35°	1137.1	1136.3	1131.2	1081.9	1009.2	932.7	853.4	840.9	839.4	883.5	827.6
37.5°	1240.0	1234.8	1225.3	1175.3	1117.2	1044.5	959.9	940.1	936.4	945.2	879.8
40°	1350.2	1356.8	1341.4	1289.2	1226.0	1171.6	1053.3	1023.1	998.2	1023.9	982.0
42.5°	1514.1	1519.3	1492.1	1456.1	1374.5	1323.8	1204.0	1162.8	1151.0	1190.0	1142.9
45°	1719.9	1710.4	1692.0	1667.0	1599.4	1522.2	1397.3	1358.3	1345.8	1412.7	1335.5
47.5°	1880.2	1878.7	1879.4	1874.3	1864.0	1771.4	1622.9	1596.5	1584.0	1680.2	1595.0
50°	1981.6	1987.5	2012.5	2076.4	2123.5	2084.5	1910.3	1878.0	1868.4	1968.4	1853.0
52.5°	2058.0	2072.0	2113.9	2240.3	2391.0	2404.2	2260.2	2214.6	2192.6	2220.5	2060.2
55°	2097.0	2103.6	2167.6	2354.3	2590.2	2685.0	2624.7	2586.5	2497.6	2444.7	2303.5
57.5°	2005.9	1995.6	2105.8	2343.2	2693.1	2911.4	2937.1	2893.8	2751.2	2710.0	2599.0
60°	1767.0	1762.6	1886.8	2172.0	2603.4	2964.3	3168.7	3141.5	3010.6	2912.9	2808.5
62.5°	1348.0	1355.4	1486.9	1777.3	2283.7	2812.2	3297.3	3319.3	3180.4	3034.9	2963.6
64°	1082.7	1073.9	1194.4	1489.9	2003.7	2609.3	3287.7	3345.8	3231.9	3098.8	2977.5
65°	909.2	890.1	1005.5	1273.0	1767.0	2462.3	3220.1	3313.5	3235.5	3114.3	2926.8
67.5°	478.5	488.8	538.0	773.2	1192.9	1861.8	2899.6	3040.8	3072.4	2903.3	2550.5
70°	214.6	216.1	247.7	394.7	660.0	1207.6	2332.2	2560.8	2578.4	2385.1	1847.8
72.5°	71.3	72.0	109.5	158.0	277.1	559.3	1575.1	1783.1	1821.4	1546.5	1002.6
75°	44.1	45.6	58.1	85.3	128.6	195.5	798.2	939.4	947.4	685.8	364.6
77.5°	27.9	29.4	35.3	50.7	70.6	74.2	261.7	316.8	358.7	247.0	113.2
80°	17.6	17.6	22.8	30.9	36.8	31.6	71.3	94.1	113.2	83.1	38.2
82.5°	6.6	6.6	11.8	16.9	15.4	11.0	19.1	25.0	43.4	41.2	18.4
85°	0.0	0.0	0.7	1.5	0.7	1.5	3.7	5.1	8.1	11.8	5.9
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	1.5
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°	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6	425.6
2.5°	427.0	428.5	431.5	432.2	432.9	430.7	432.9	430.7	432.2	432.2	432.2
5°	433.7	435.9	438.1	438.8	438.1	432.9	434.4	430.7	430.0	430.0	430.0
7.5°	442.5	444.7	448.4	446.2	441.7	434.4	433.7	428.5	426.3	426.3	427.0
10°	458.6	460.9	462.3	457.9	449.1	438.1	430.0	419.0	413.8	411.6	411.6
12.5°	479.2	481.4	480.7	473.4	457.2	434.4	411.6	390.3	374.9	369.0	363.1
15°	501.3	504.2	502.8	487.3	456.4	416.0	371.9	321.9	291.1	271.2	267.5
17.5°	527.0	529.9	522.6	494.7	445.4	377.1	293.3	225.6	180.8	163.9	163.2
20°	558.6	557.1	539.5	495.4	425.6	305.0	196.2	141.1	122.0	117.6	116.9
22.5°	594.6	588.0	555.7	491.0	371.2	207.3	126.4	111.7	109.5	108.0	108.0
25°	615.2	603.4	561.6	478.5	285.9	132.3	107.3	104.4	101.4	98.5	97.8
27.5°	631.4	613.7	563.8	437.3	190.4	101.4	97.0	94.1	89.7	85.3	84.5
30°	660.8	634.3	567.4	365.3	116.9	86.7	84.5	79.4	72.8	68.4	66.9
32.5°	713.7	675.5	582.1	273.4	85.3	76.4	70.6	63.9	56.6	52.2	52.2
35°	770.3	714.4	589.5	180.1	74.2	66.9	58.1	50.0	43.4	39.7	39.0
37.5°	822.5	770.3	587.3	110.3	66.2	57.3	47.8	39.7	33.8	30.9	30.9
40°	929.1	868.1	557.1	75.7	58.1	48.5	39.0	30.9	27.2	25.0	25.0
42.5°	1081.2	975.4	490.3	64.7	50.7	40.4	30.9	25.7	22.8	20.6	20.6
45°	1251.7	1093.7	391.0	58.1	44.1	33.8	25.7	21.3	18.4	17.6	17.6
47.5°	1475.2	1237.0	287.4	52.2	38.2	28.7	21.3	17.6	16.2	15.4	15.4
50°	1670.7	1353.2	196.2	45.6	33.8	24.3	18.4	16.2	14.7	14.0	14.0
52.5°	1848.6	1434.0	129.4	39.7	30.1	19.8	16.9	14.7	14.0	13.2	13.2
55°	2058.0	1495.8	87.5	34.5	26.5	18.4	16.2	14.7	13.2	13.2	12.5
57.5°	2235.9	1532.5	62.5	29.4	23.5	16.9	15.4	14.0	12.5	11.8	11.8
60°	2339.6	1489.1	45.6	25.7	20.6	15.4	14.0	12.5	11.8	11.0	11.0
62.5°	2368.2	1405.3	35.3	22.1	17.6	14.0	12.5	11.0	10.3	9.6	9.6
64°	2302.1	1315.7	30.1	19.1	15.4	12.5	11.8	10.3	8.8	7.4	7.4
65°	2208.7	1232.6	27.2	17.6	14.0	11.8	11.0	9.6	7.4	5.9	5.9
67.5°	1840.5	982.7	22.1	14.7	11.0	10.3	8.8	7.4	5.1	3.7	3.7
70°	1306.9	687.2	16.9	11.8	9.6	9.6	8.1	5.9	2.9	1.5	1.5
72.5°	691.6	357.2	14.0	9.6	7.4	7.4	6.6	3.7	2.2	1.5	0.7
75°	241.8	117.6	11.8	8.1	6.6	5.1	4.4	2.9	2.2	1.5	0.7
77.5°	73.5	39.0	10.3	8.1	5.9	4.4	5.1	4.4	4.4	2.9	2.2
80°	23.5	14.0	5.9	5.1	5.9	5.9	5.1	4.4	5.1	3.7	2.9
82.5°	8.8	5.1	2.2	2.9	2.9	3.7	3.7	2.9	2.2	0.7	0.0
85°	2.9	2.2	1.5	2.2	2.2	2.2	1.5	1.5	0.7	0.0	0.0
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7	0.0	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

(END OF REPORT)