

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: P401751

Luminaire Tested: **ENT-SA1E-827-U-T4FT-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-827-U-T4FT-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3662 lumens  
Efficiency: N/A  
Efficacy: 64.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

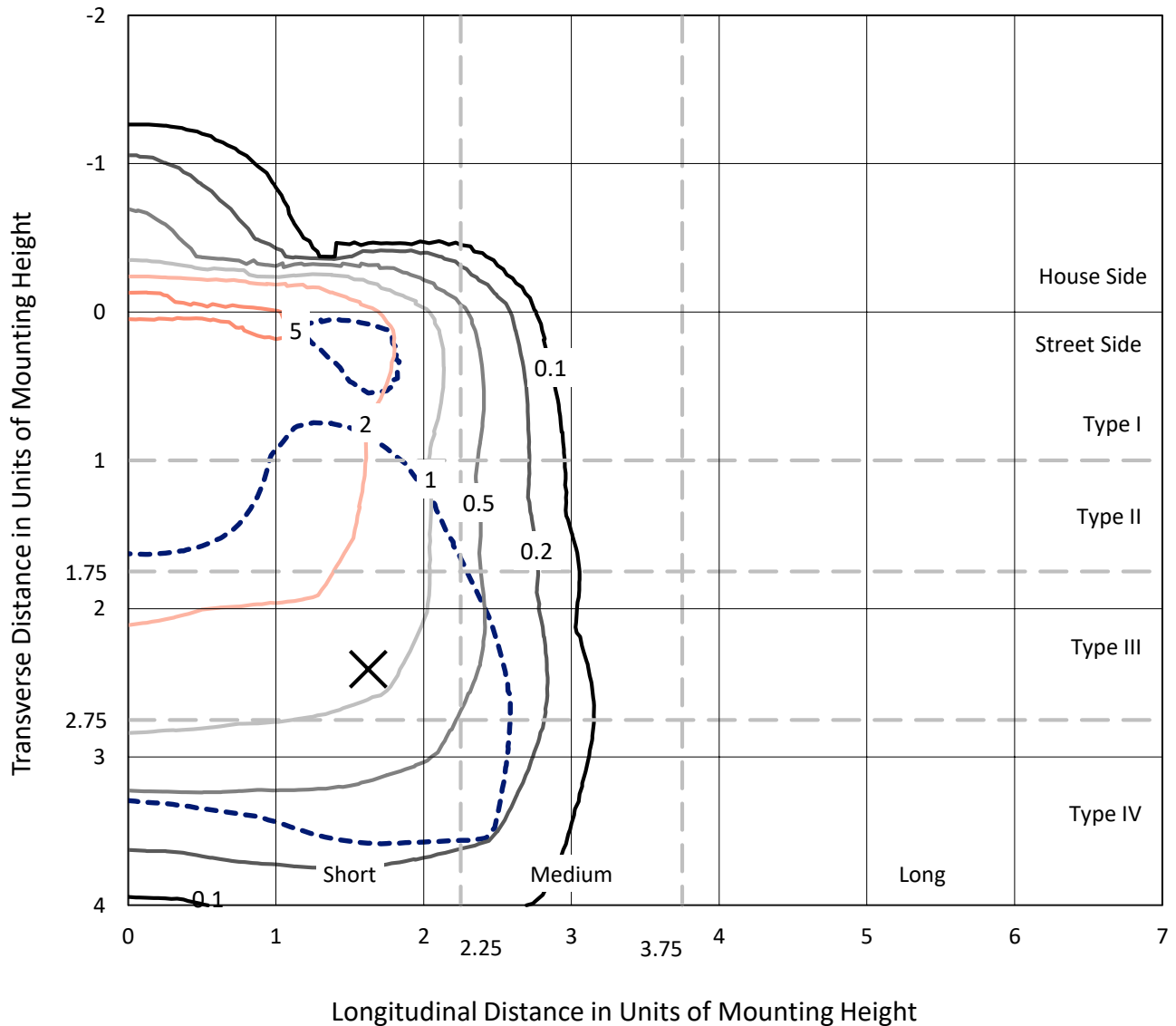
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

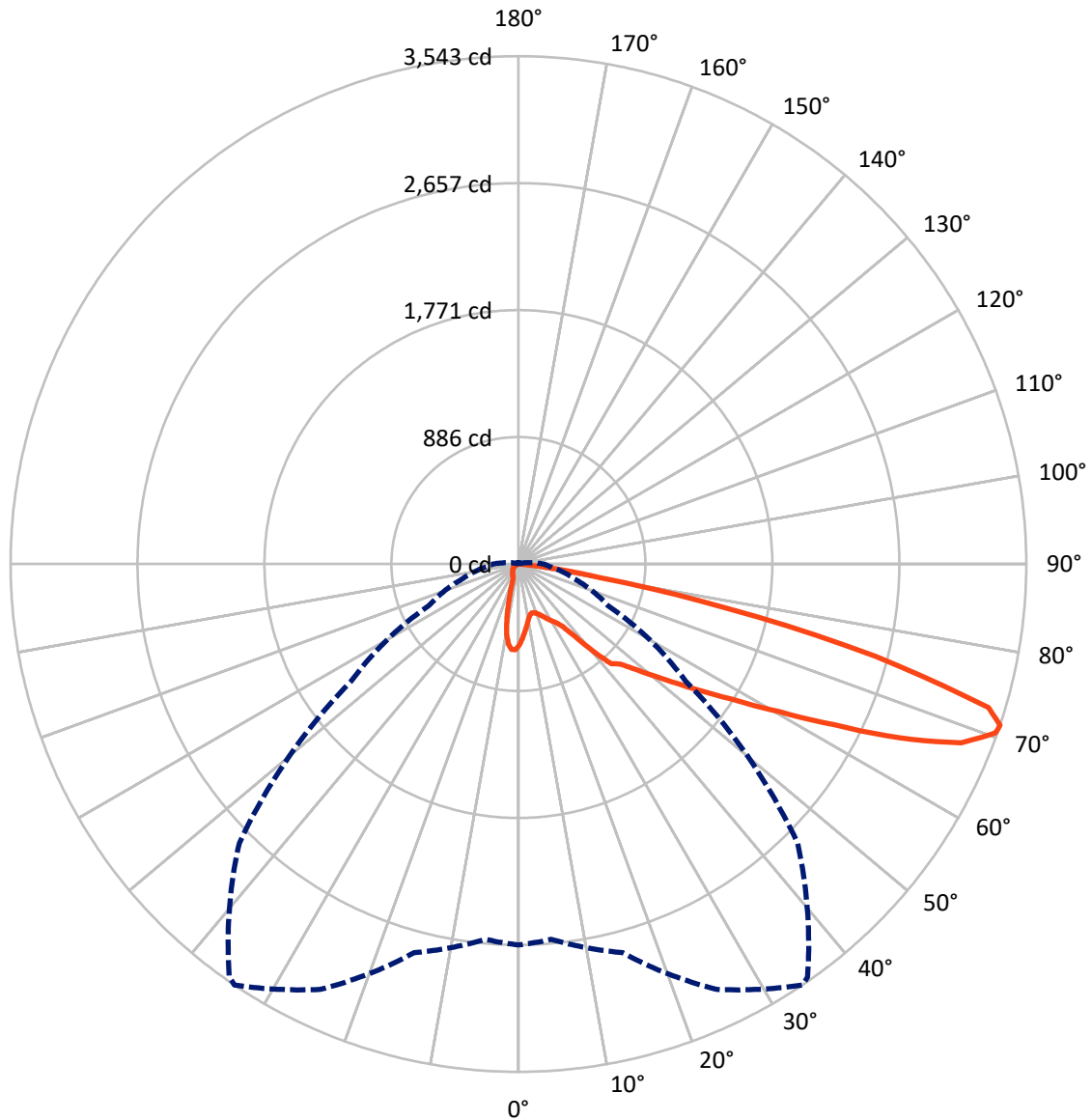
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	404.9	0.0	404.9
	% Fixture	11.1	0.0	11.1
<b>Street Side</b>	Lumens	3257.1	0.0	3257.1
	% Fixture	88.9	0.0	88.9
<b>Total</b>	Lumens	3662.0	0.0	3662.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.0	1.4
10°-20°	114.6	3.1
20°-30°	171.1	4.7
30°-40°	285.7	7.8
40°-50°	516.1	14.1
50°-60°	818.8	22.4
60°-70°	1100.3	30.0
70°-80°	583.8	15.9
80°-90°	21.5	0.6
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°	3662.0	100.0
0°-180°	3662.0	100.0

**Coefficient of Utilization**



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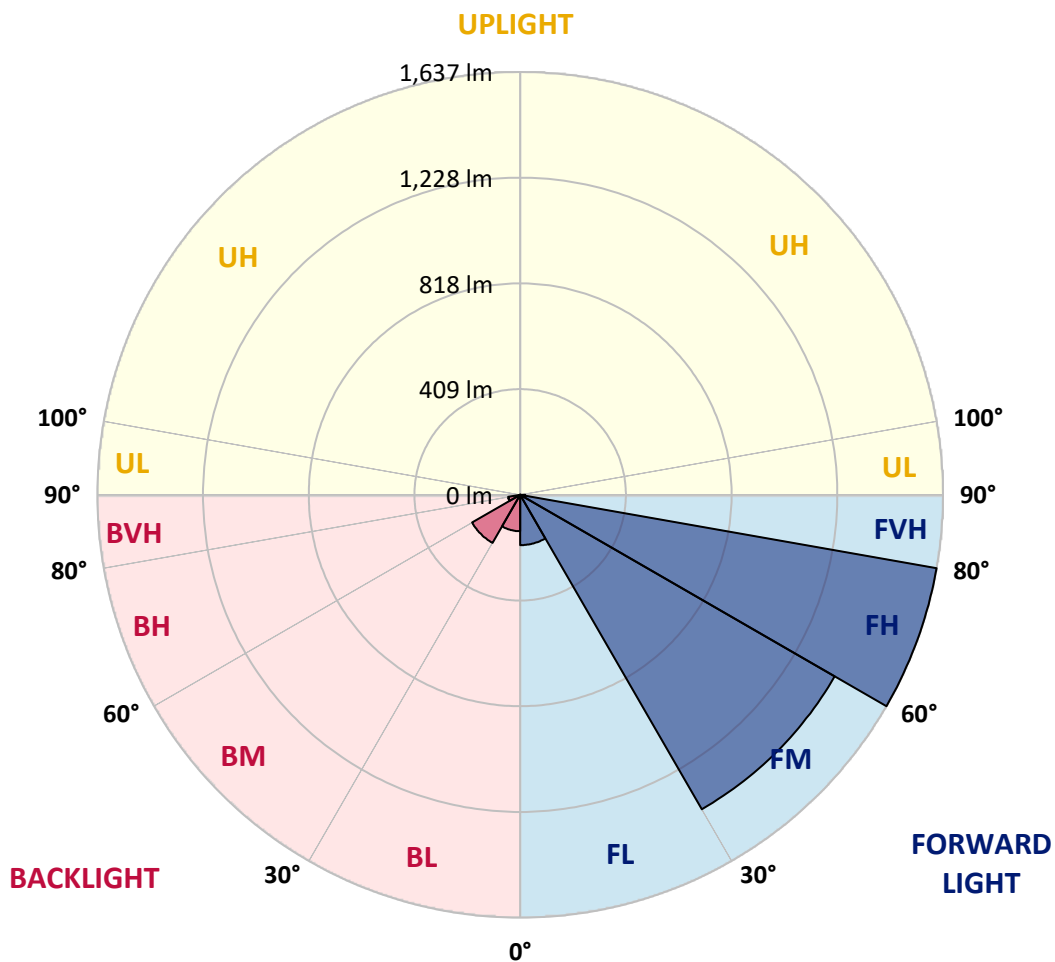
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	194.9	5.3			
FM	(30°-60°)	1405.7	38.4			
FH	(60°-80°)	1636.9	44.7			G1/1800
FVH	(80°-90°)	19.6	0.5			G1/100
BL	(0°-30°)	140.8	3.8	B1/500		
BM	(30°-60°)	214.9	5.9	B0/220		
BH	(60°-80°)	47.3	1.3	B0/110		G0/110
BVH	(80°-90°)	1.9	0.1			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°	34°	35°	45°	55°	65°	75°	85°
0°	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4
2.5°	516.7	510.1	516.0	518.9	521.1	524.0	528.5	536.5	545.4	555.6	561.5
5°	450.5	454.2	456.4	464.5	472.6	474.1	488.0	504.2	524.8	545.4	563.0
7.5°	396.9	396.9	403.5	416.0	429.2	430.7	455.0	476.3	505.7	537.3	565.9
10°	354.3	355.7	360.9	373.4	390.3	394.0	421.1	450.5	487.3	528.5	568.9
12.5°	340.3	339.6	338.8	347.6	361.6	365.3	395.4	430.7	474.1	524.0	576.2
15°	349.1	346.9	341.8	343.2	352.1	355.7	382.2	417.5	466.0	523.3	588.7
17.5°	363.1	360.1	350.6	347.6	357.2	360.9	382.9	413.8	463.0	527.0	603.4
20°	380.0	377.0	362.3	358.7	368.2	371.2	394.0	420.4	464.5	534.3	623.3
22.5°	404.2	400.6	379.3	374.8	384.4	387.3	411.6	435.8	473.3	547.6	650.5
25°	433.6	429.2	402.0	396.2	407.9	410.9	435.1	457.9	488.0	565.2	685.0
27.5°	466.0	460.8	432.2	420.4	433.6	438.1	460.8	485.8	509.3	587.3	730.6
30°	495.4	489.5	461.6	448.3	461.6	463.8	491.0	518.9	543.9	624.7	797.5
32.5°	577.0	562.3	518.9	480.7	489.5	493.9	527.0	571.1	608.6	669.6	883.5
35°	699.0	687.2	634.3	568.1	537.3	538.7	581.4	637.2	654.1	721.8	990.0
37.5°	816.6	806.3	760.0	699.0	640.2	642.4	649.7	703.4	723.2	812.2	1120.1
40°	945.2	929.0	892.3	834.2	793.8	784.2	748.2	785.7	829.1	926.1	1262.0
42.5°	1004.7	989.3	951.1	954.7	950.3	933.4	862.1	914.3	962.8	1091.5	1418.5
45°	1103.2	1073.1	994.4	1000.3	994.4	995.9	1013.5	1089.2	1131.1	1266.4	1595.6
47.5°	1194.3	1159.8	1077.5	1071.6	1097.3	1110.6	1205.4	1297.2	1300.9	1418.5	1734.6
50°	1277.4	1252.4	1176.7	1177.4	1224.5	1239.2	1428.8	1512.6	1438.4	1535.4	1843.3
52.5°	1387.6	1352.4	1284.8	1309.0	1382.5	1395.7	1651.5	1701.5	1537.6	1641.2	1928.6
55°	1489.8	1470.7	1420.7	1456.7	1569.2	1603.7	1877.9	1847.0	1607.4	1735.3	1969.8
57.5°	1657.4	1639.0	1625.8	1644.2	1794.8	1838.2	2107.2	1949.9	1661.8	1797.8	1950.6
60°	1936.7	1918.3	1878.6	1895.5	2091.8	2113.8	2287.3	2054.3	1683.1	1815.4	1875.7
62.5°	2281.4	2258.6	2194.7	2272.6	2469.5	2468.8	2474.0	2109.4	1655.9	1763.2	1678.0
65°	2592.3	2560.7	2527.6	2686.4	2926.0	2892.9	2672.4	2116.0	1569.9	1511.1	1298.0
67.5°	2818.7	2806.2	2824.5	3072.2	3330.2	3297.1	2865.0	2024.9	1306.8	1090.7	801.9
70°	2809.8	2784.1	2901.0	3296.4	3530.9	3503.7	2856.9	1664.0	871.7	577.7	335.9
71°	2657.7	2628.3	2806.2	3274.4	3542.6	3516.9	2754.0	1423.7	689.4	407.9	221.2
72.5°	2053.5	2142.5	2425.4	3038.4	3429.4	3396.4	2474.0	1090.0	436.6	235.9	111.0
75°	868.8	917.3	1439.8	2168.9	2572.4	2555.5	1667.7	503.5	200.7	106.6	42.6
77.5°	223.4	220.5	441.0	930.5	1497.9	1524.4	768.8	172.7	104.4	75.7	24.3
80°	43.4	47.0	125.7	323.4	571.8	587.3	250.6	75.7	69.8	59.5	12.5
82.5°	4.4	5.1	22.0	100.0	191.8	185.2	55.1	28.7	42.6	40.4	5.9
85°	0.0	0.0	0.7	0.7	0.7	0.7	0.7	2.9	10.3	11.0	1.5
87.5°	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4	567.4
2.5°	565.9	572.6	579.9	585.0	590.2	590.9	598.3	596.8	599.0	599.7	599.0
5°	572.6	581.4	595.3	602.7	605.6	600.5	599.0	590.9	588.0	584.3	580.6
7.5°	579.9	590.9	607.1	610.8	600.5	581.4	565.9	546.1	527.7	516.0	517.4
10°	588.0	602.0	615.2	605.6	579.2	541.7	498.3	454.2	415.3	400.6	405.7
12.5°	598.3	615.2	621.1	594.6	543.2	467.4	388.8	321.9	281.5	257.2	254.3
15°	613.7	630.6	624.0	577.0	485.8	367.5	269.7	202.1	163.2	150.7	144.1
17.5°	632.8	649.0	624.0	545.4	404.2	263.1	163.9	122.7	110.2	107.3	108.0
20°	656.3	671.8	621.1	497.6	311.6	161.7	109.5	101.4	101.4	101.4	100.7
22.5°	687.9	696.0	616.7	434.4	214.6	109.5	97.0	96.3	97.0	97.0	97.0
25°	726.2	724.7	608.6	358.7	135.2	93.3	92.6	92.6	93.3	94.1	94.1
27.5°	776.9	761.4	594.6	268.3	95.5	86.7	88.2	89.7	91.1	92.6	92.6
30°	847.4	810.0	571.8	181.5	80.8	80.1	83.1	87.5	89.7	91.1	91.1
32.5°	923.1	859.9	532.9	116.1	74.2	73.5	76.4	83.1	88.9	90.4	90.4
35°	1018.7	913.6	474.8	83.8	69.8	68.4	71.3	77.2	86.0	90.4	90.4
37.5°	1119.4	970.9	390.3	70.6	65.4	63.9	66.1	70.6	80.8	88.9	89.7
40°	1226.7	1021.6	293.3	65.4	61.0	60.3	61.0	65.4	73.5	84.5	86.7
42.5°	1334.7	1064.3	205.1	60.3	57.3	55.9	57.3	60.3	67.6	77.2	78.6
45°	1453.8	1111.3	136.7	55.9	54.4	52.9	54.4	56.6	61.7	66.9	67.6
47.5°	1540.5	1128.2	94.1	50.7	50.0	50.7	51.4	52.9	55.9	56.6	55.9
50°	1597.9	1119.4	67.6	45.6	46.3	48.5	48.5	49.2	49.2	47.0	46.3
52.5°	1639.7	1087.0	52.2	39.0	43.4	45.6	45.6	44.1	42.6	39.7	39.0
55°	1644.2	1014.3	41.2	33.8	39.0	42.6	41.9	39.0	36.0	33.1	33.1
57.5°	1588.3	904.0	33.8	28.7	33.8	37.5	36.0	33.1	29.4	27.2	27.2
60°	1497.9	790.8	28.7	24.3	27.9	31.6	29.4	27.2	23.5	21.3	21.3
62.5°	1331.1	679.1	23.5	19.8	22.8	25.0	24.3	22.0	18.4	16.9	16.2
65°	1020.2	516.7	17.6	15.4	17.6	20.6	19.1	16.9	14.7	12.5	11.8
67.5°	613.0	310.9	14.0	11.8	14.0	16.2	14.7	12.5	10.3	8.8	8.8
70°	259.4	133.0	11.0	8.8	10.3	12.5	11.8	10.3	8.1	7.3	7.3
71°	176.4	94.8	9.6	8.1	9.6	11.8	11.0	9.6	8.1	7.3	7.3
72.5°	90.4	48.5	8.1	6.6	8.8	10.3	10.3	8.8	7.3	7.3	7.3
75°	32.3	20.6	6.6	5.9	7.3	7.3	8.1	8.1	8.1	8.1	7.3
77.5°	18.4	12.5	5.9	5.9	5.9	6.6	8.1	8.8	9.6	9.6	8.8
80°	10.3	6.6	3.7	4.4	5.9	6.6	8.1	8.8	10.3	10.3	9.6
82.5°	5.1	2.2	0.7	2.2	3.7	5.9	6.6	7.3	8.8	8.1	8.1
85°	0.7	0.0	0.0	0.7	2.2	2.9	4.4	5.9	7.3	7.3	6.6
87.5°	0.0	0.0	0.0	0.0	0.7	1.5	2.2	3.7	5.1	5.9	5.1
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)