

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: P401444

Luminaire Tested: **ENT-SA1D-727-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1D-727-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4807 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

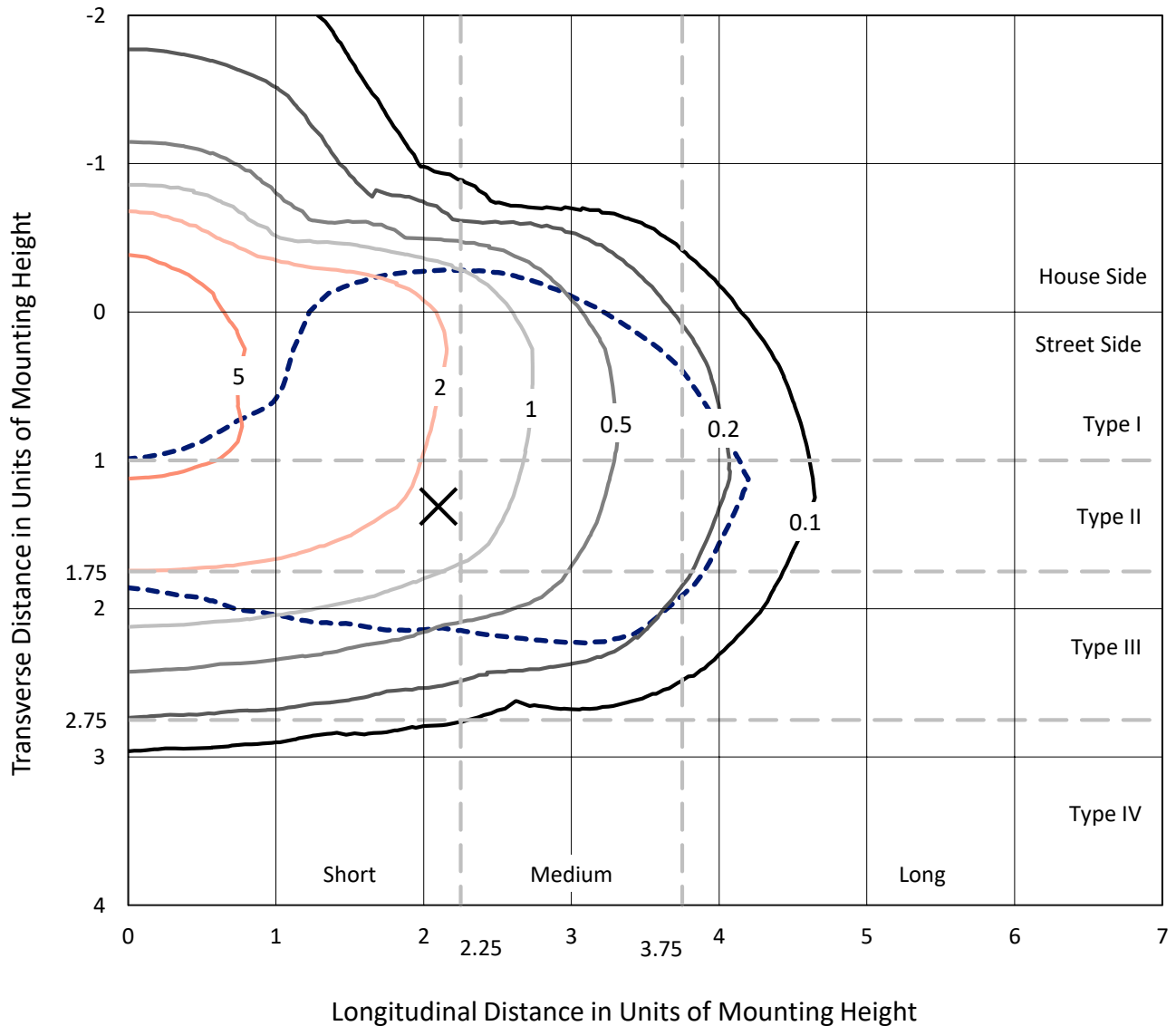
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

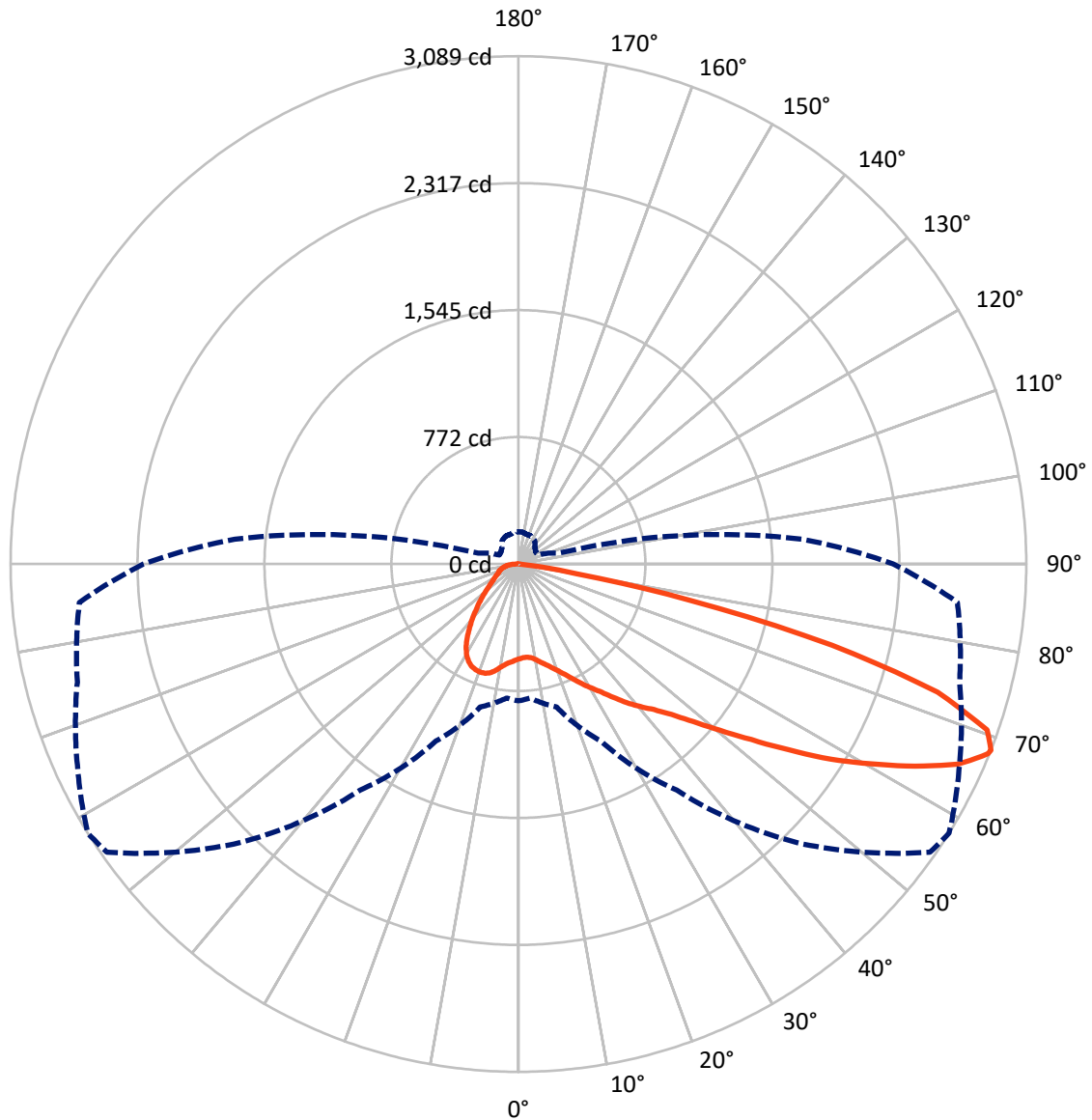
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1125.5	0.0	1125.5
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	3681.5	0.0	3681.5
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	4807.0	0.0	4807.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	1.2
10°-20°	186.0	3.9
20°-30°	334.4	7.0
30°-40°	491.3	10.2
40°-50°	720.5	15.0
50°-60°	1077.0	22.4
60°-70°	1259.4	26.2
70°-80°	620.9	12.9
80°-90°	60.6	1.3
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°	4807.0	100.0
0°-180°	4807.0	100.0



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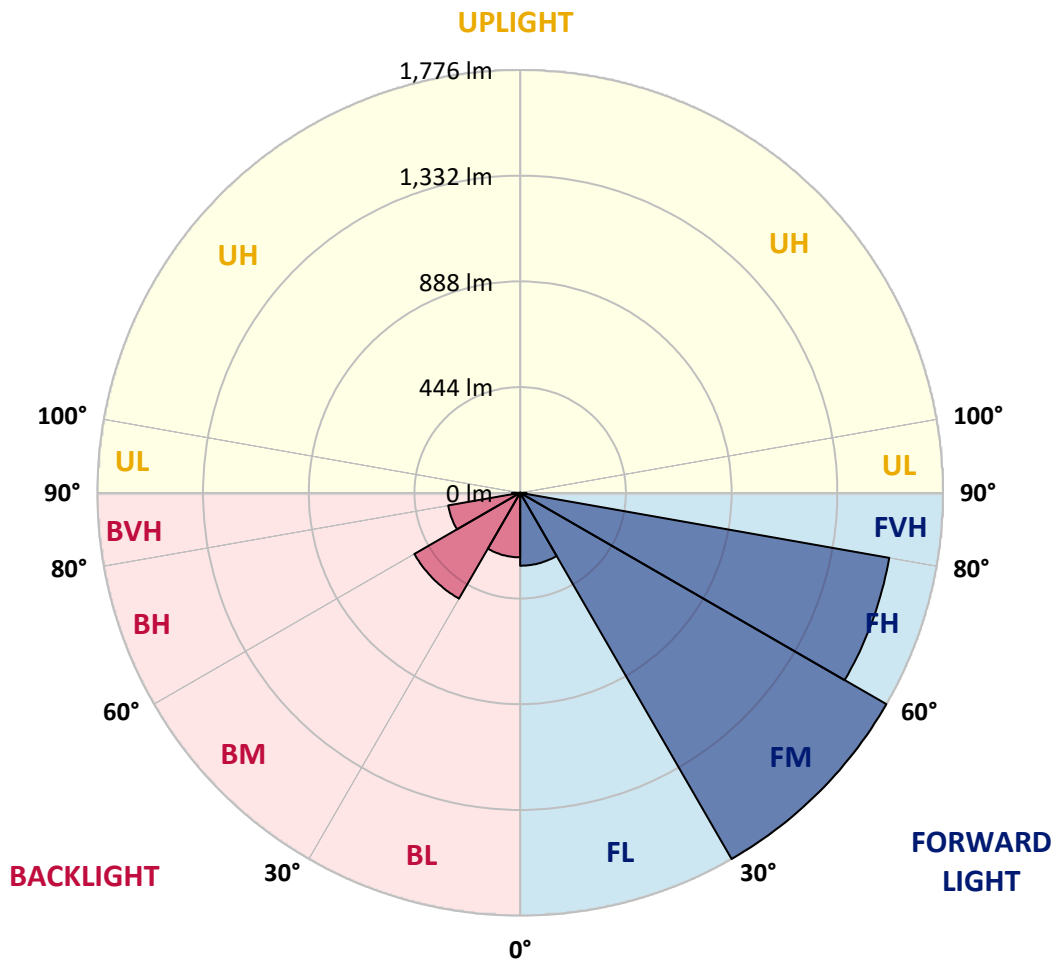
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	306.2	6.4			
FM	(30°-60°)	1775.5	36.9			
FH	(60°-80°)	1573.6	32.7			G1/1800
FVH	(80°-90°)	26.1	0.5			G1/100
BL	(0°-30°)	271.0	5.6	B1/500		
BM	(30°-60°)	513.3	10.7	B1/1000		
BH	(60°-80°)	306.7	6.4	B1/500		G1/500
BVH	(80°-90°)	34.5	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
2.5°	563.2	563.2	565.2	565.8	567.2	568.5	569.9	570.5	572.6	575.2	576.6
5°	558.5	559.1	560.5	561.1	563.2	565.8	567.9	569.2	572.6	577.9	581.3
7.5°	569.2	571.2	571.9	572.6	573.2	575.2	575.2	575.9	579.3	584.6	589.3
10°	586.7	588.0	590.0	592.0	594.0	595.4	591.4	592.0	593.4	598.7	605.4
12.5°	608.8	608.8	609.5	612.2	614.2	618.2	614.2	614.2	614.2	618.9	626.9
15°	633.6	632.3	632.3	635.0	635.7	638.3	636.3	636.3	639.0	643.7	651.8
17.5°	661.8	663.8	661.8	660.5	658.5	659.8	661.2	662.5	667.9	675.3	680.0
20°	702.8	706.1	704.8	699.4	690.7	686.7	691.4	694.0	704.8	713.5	714.2
22.5°	767.9	765.9	763.9	754.5	737.0	726.3	726.9	731.0	747.7	761.2	754.5
25°	828.3	830.3	830.3	816.9	794.1	771.9	773.9	775.9	792.7	804.8	786.7
27.5°	901.5	900.1	899.4	881.3	853.8	832.3	820.9	826.3	838.4	843.1	808.2
30°	977.3	982.7	977.3	951.8	925.6	898.1	875.3	873.9	880.0	879.3	833.7
32.5°	1068.6	1063.9	1061.9	1032.3	999.5	963.2	934.3	929.6	926.3	921.6	863.9
35°	1139.1	1145.1	1145.1	1119.6	1080.7	1045.1	1000.1	996.1	988.0	972.6	903.5
37.5°	1222.3	1221.0	1225.7	1196.1	1157.2	1123.0	1081.3	1069.9	1051.8	1029.0	950.5
40°	1303.5	1306.9	1317.6	1282.0	1246.5	1219.6	1160.6	1139.7	1112.2	1091.4	1018.9
42.5°	1414.3	1419.0	1423.0	1393.5	1351.2	1327.0	1235.7	1209.6	1194.1	1190.1	1109.5
45°	1548.5	1556.6	1559.9	1533.1	1508.9	1451.2	1330.4	1306.2	1289.4	1306.9	1233.0
47.5°	1677.4	1673.4	1688.8	1688.1	1690.8	1621.7	1466.6	1430.4	1414.3	1458.6	1374.7
50°	1749.9	1755.9	1789.5	1823.7	1871.4	1821.7	1624.4	1588.1	1569.3	1624.4	1541.1
52.5°	1787.5	1795.5	1840.5	1936.5	2037.8	2014.4	1814.3	1774.1	1757.9	1811.6	1719.7
55°	1790.8	1795.5	1855.9	2005.0	2164.7	2172.1	2031.1	1992.9	1970.7	2005.6	1914.3
57.5°	1735.1	1721.0	1825.1	2015.0	2245.9	2336.5	2269.4	2241.9	2179.5	2217.1	2156.0
60°	1635.8	1649.9	1751.9	1973.4	2280.2	2464.7	2508.4	2466.8	2394.3	2409.7	2416.4
62.5°	1485.4	1503.5	1609.6	1876.8	2252.6	2573.5	2729.2	2708.4	2611.1	2603.0	2615.1
65°	1271.3	1260.6	1378.7	1665.3	2122.4	2609.7	2946.0	2937.3	2821.2	2726.5	2731.2
67.5°	916.9	906.8	989.4	1285.4	1770.0	2474.8	3061.5	3080.9	2948.0	2780.9	2708.4
68°	832.3	818.2	900.8	1188.1	1679.4	2397.0	3055.4	3089.0	2957.4	2777.5	2680.2
70°	479.3	456.4	536.3	775.3	1236.4	2017.7	2931.9	3024.6	2935.3	2712.4	2495.6
72.5°	150.4	150.4	207.4	313.5	606.8	1276.7	2508.4	2666.1	2684.9	2465.4	2074.1
75°	94.0	94.0	108.1	148.3	241.6	541.7	1730.4	1970.7	2133.2	2075.4	1512.3
77.5°	63.8	62.4	71.8	92.0	134.9	173.8	868.6	1067.3	1304.9	1417.0	884.7
80°	34.9	35.6	44.3	55.0	76.5	80.5	255.1	360.4	574.6	673.2	335.6
82.5°	20.1	19.5	21.5	24.2	33.6	34.9	73.2	89.9	150.4	139.6	89.9
85°	0.0	0.7	0.7	0.7	1.3	3.4	9.4	14.1	22.8	31.5	22.2
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.3	1.3	1.3	1.3	2.0
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°	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3	577.3
2.5°	577.9	579.9	583.3	586.0	587.3	586.0	590.7	590.0	591.4	591.4	592.7
5°	584.0	586.7	592.7	596.0	599.4	600.7	606.1	607.5	610.1	611.5	610.8
7.5°	592.7	596.0	603.4	609.5	614.2	617.5	626.3	630.3	634.3	635.7	637.0
10°	608.8	613.5	621.6	628.9	635.7	640.4	647.7	653.1	657.1	658.5	659.8
12.5°	630.3	635.7	645.7	655.8	663.2	665.9	665.2	663.8	663.8	663.2	663.8
15°	655.1	660.5	673.2	682.6	683.3	674.6	662.5	656.5	655.1	655.1	655.8
17.5°	684.0	690.7	698.7	704.1	691.4	669.9	655.8	649.7	648.4	647.7	646.4
20°	716.9	720.9	723.6	716.9	688.7	663.8	647.7	639.0	632.3	631.6	628.9
22.5°	751.8	750.4	747.1	722.9	681.3	649.7	627.6	611.5	602.8	602.1	599.4
25°	777.3	771.9	761.8	724.3	667.9	626.9	595.4	569.9	558.5	553.1	554.4
27.5°	794.1	782.7	765.2	717.5	644.4	592.0	547.7	514.2	497.4	494.7	496.7
30°	814.2	796.1	767.9	700.8	610.8	543.0	485.3	451.7	442.3	437.6	439.0
32.5°	838.4	814.9	776.6	675.3	568.5	486.0	423.5	400.1	389.3	380.6	383.3
35°	869.9	840.4	790.7	639.0	514.8	425.6	379.2	357.8	338.3	328.9	329.6
37.5°	906.8	873.3	802.8	596.7	456.4	379.9	341.0	315.5	291.3	273.2	269.8
40°	965.9	938.4	812.9	549.7	400.7	342.3	303.4	274.5	251.7	233.6	231.6
42.5°	1064.6	1016.9	813.5	493.4	353.1	310.1	272.5	241.0	215.5	200.0	199.4
45°	1180.7	1106.9	799.4	432.9	311.4	277.9	245.0	209.4	194.7	184.6	183.2
47.5°	1318.3	1210.2	768.6	376.6	275.9	246.3	216.8	195.3	184.6	177.2	177.2
50°	1475.4	1331.7	737.7	328.2	241.6	220.8	200.7	189.3	181.2	174.5	173.8
52.5°	1652.6	1475.4	727.6	279.2	213.5	197.3	195.3	184.6	177.9	173.2	171.8
55°	1864.0	1636.5	737.0	241.0	191.3	187.9	192.0	183.2	178.5	171.2	169.1
57.5°	2108.3	1793.5	726.9	208.8	175.9	179.2	187.9	183.2	179.2	169.8	167.1
60°	2338.6	1933.8	658.5	181.9	161.1	168.5	182.6	177.2	171.2	169.1	167.8
62.5°	2462.1	1979.4	524.9	161.1	149.7	157.7	173.8	167.1	163.1	167.8	168.5
65°	2463.4	1927.8	386.0	145.7	140.3	148.3	165.1	163.1	165.8	176.5	178.5
67.5°	2326.5	1770.7	272.5	131.6	130.9	141.0	169.1	182.6	184.6	195.3	195.3
68°	2279.5	1731.8	253.1	129.5	128.9	141.0	172.5	185.9	187.3	197.3	196.7
70°	2021.7	1463.9	183.2	121.5	125.5	151.0	190.6	195.3	187.3	198.7	198.0
72.5°	1580.1	1082.7	136.9	112.8	119.5	149.0	192.0	187.3	175.2	177.9	174.5
75°	1067.9	690.0	112.8	103.4	106.1	126.2	174.5	176.5	162.4	159.8	155.7
77.5°	559.1	323.5	91.3	92.0	94.6	109.4	155.7	160.4	147.7	139.6	138.3
80°	206.1	128.2	74.5	81.2	82.6	96.0	133.6	141.0	128.9	122.8	121.5
82.5°	75.2	63.8	61.8	71.2	69.8	81.9	116.8	122.2	109.4	103.4	100.0
85°	20.8	23.5	38.9	55.7	54.4	63.8	94.0	98.7	87.9	72.5	70.5
87.5°	1.3	4.7	15.4	32.9	34.2	39.6	67.8	74.5	65.1	53.7	53.0
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)