

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: P401750

Luminaire Tested: **ENT-SA1E-827-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401750  
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-SA1E-827-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5265 lumens  
Efficiency: N/A  
Efficacy: 92.0 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

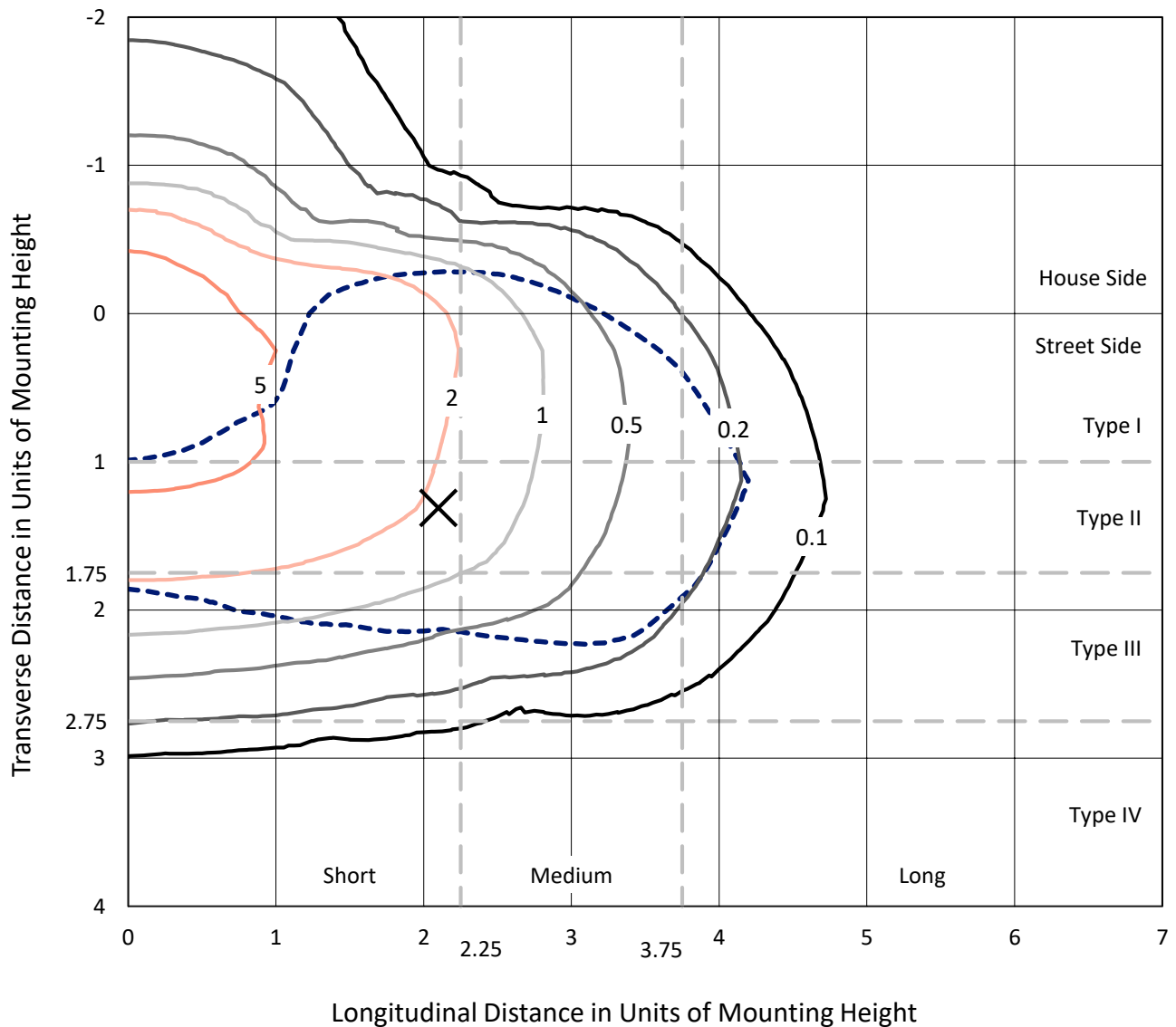
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

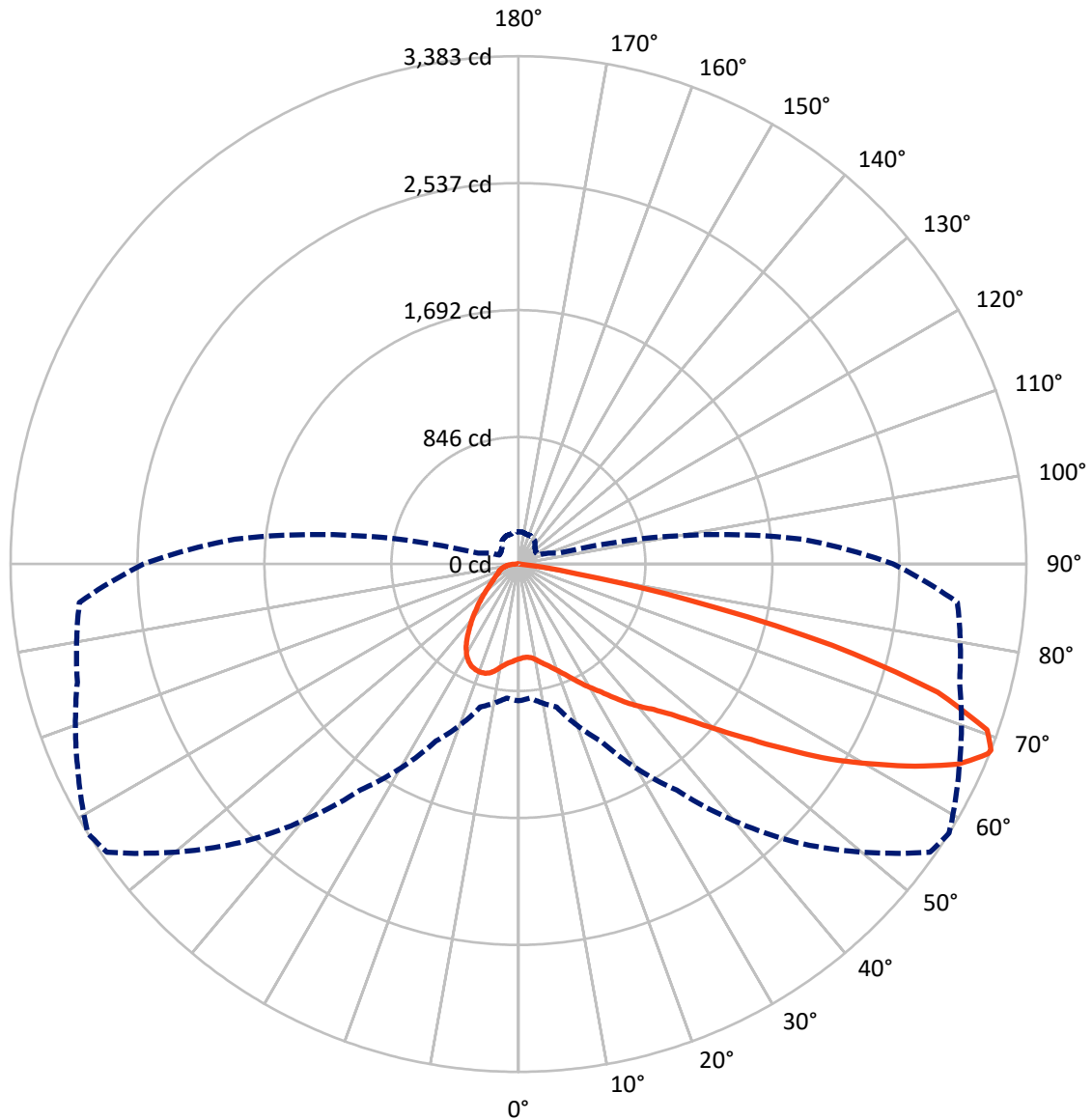
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 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	1232.8	0.0	1232.8
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	4032.2	0.0	4032.2
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	5265.0	0.0	5265.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	1.2
10°-20°	203.7	3.9
20°-30°	366.3	7.0
30°-40°	538.1	10.2
40°-50°	789.2	15.0
50°-60°	1179.7	22.4
60°-70°	1379.4	26.2
70°-80°	680.1	12.9
80°-90°	66.4	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°	5265.0	100.0
0°-180°	5265.0	100.0



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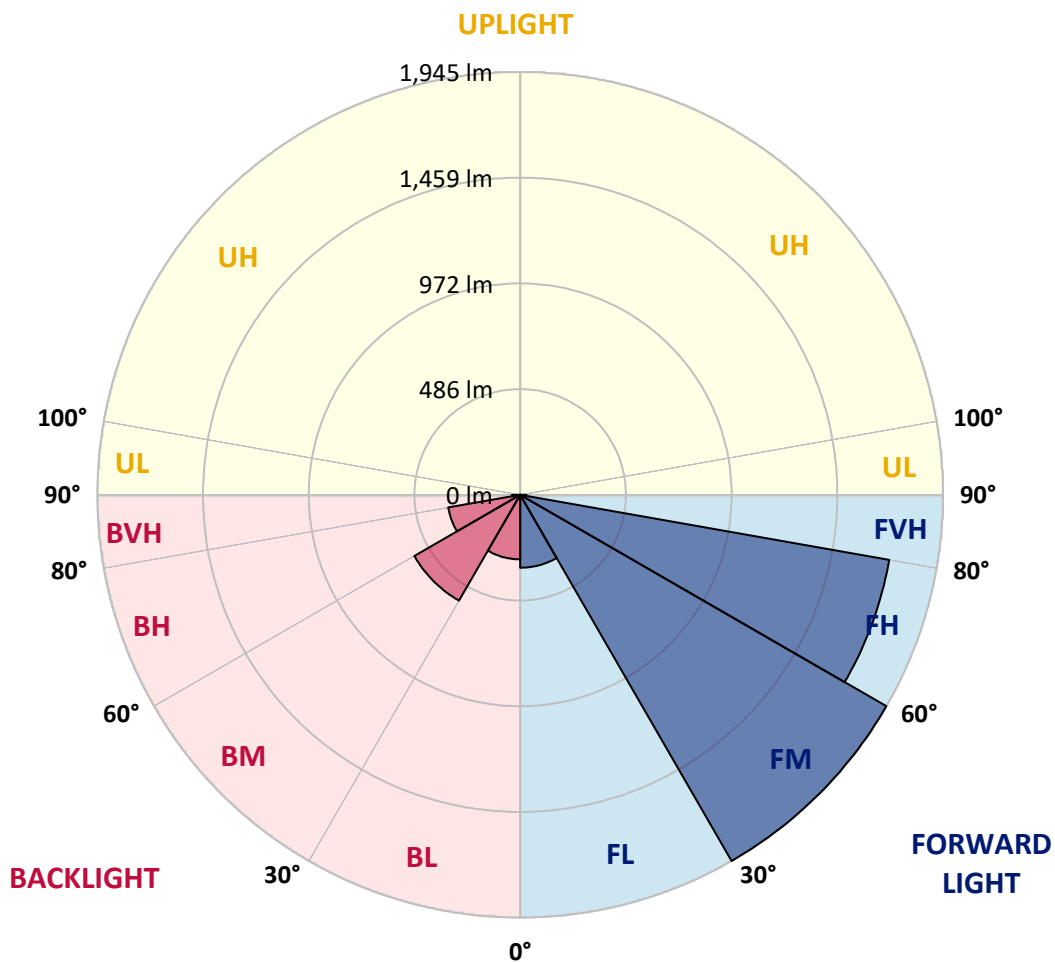
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	335.4	6.4			
FM	(30°-60°)	1944.7	36.9			
FH	(60°-80°)	1723.6	32.7			G1/1800
FVH	(80°-90°)	28.6	0.5			G1/100
BL	(0°-30°)	296.8	5.6	B1/500		
BM	(30°-60°)	562.2	10.7	B1/1000		
BH	(60°-80°)	335.9	6.4	B1/500		G1/500
BVH	(80°-90°)	37.8	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°	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3
2.5°	616.8	616.8	619.0	619.8	621.2	622.7	624.2	624.9	627.1	630.0	631.5
5°	611.7	612.4	613.9	614.6	616.8	619.8	622.0	623.4	627.1	633.0	636.7
7.5°	623.4	625.6	626.4	627.1	627.8	630.0	630.0	630.8	634.5	640.3	645.5
10°	642.5	644.0	646.2	648.4	650.6	652.1	647.7	648.4	649.9	655.8	663.1
12.5°	666.8	666.8	667.5	670.5	672.7	677.1	672.7	672.7	672.7	677.8	686.7
15°	694.0	692.5	692.5	695.5	696.2	699.2	697.0	697.0	699.9	705.0	713.9
17.5°	724.9	727.1	724.9	723.4	721.2	722.7	724.2	725.6	731.5	739.6	744.7
20°	769.7	773.4	771.9	766.1	756.5	752.1	757.2	760.2	771.9	781.5	782.2
22.5°	841.0	838.8	836.6	826.3	807.2	795.5	796.2	800.6	819.0	833.7	826.3
25°	907.2	909.4	909.4	894.7	869.7	845.5	847.7	849.9	868.2	881.5	861.6
27.5°	987.3	985.9	985.1	965.3	935.1	911.6	899.1	905.0	918.2	923.4	885.2
30°	1070.4	1076.3	1070.4	1042.5	1013.8	983.7	958.7	957.2	963.8	963.1	913.1
32.5°	1170.4	1165.3	1163.1	1130.7	1094.7	1055.0	1023.4	1018.2	1014.5	1009.4	946.2
35°	1247.6	1254.2	1254.2	1226.3	1183.6	1144.7	1095.4	1091.0	1082.2	1065.3	989.6
37.5°	1338.8	1337.3	1342.4	1310.1	1267.5	1230.0	1184.4	1171.9	1152.0	1127.0	1041.0
40°	1427.7	1431.4	1443.2	1404.2	1365.2	1335.8	1271.1	1248.3	1218.2	1195.4	1116.0
42.5°	1549.0	1554.2	1558.6	1526.2	1479.9	1453.5	1353.5	1324.8	1307.9	1303.5	1215.3
45°	1696.1	1704.9	1708.6	1679.2	1652.7	1589.5	1457.1	1430.7	1412.3	1431.4	1350.5
47.5°	1837.2	1832.8	1849.7	1849.0	1851.9	1776.2	1606.4	1566.7	1549.0	1597.5	1505.6
50°	1916.6	1923.2	1960.0	1997.5	2049.7	1995.3	1779.1	1739.4	1718.9	1779.1	1688.0
52.5°	1957.8	1966.6	2015.9	2121.0	2232.0	2206.3	1987.2	1943.1	1925.4	1984.3	1883.5
55°	1961.5	1966.6	2032.8	2196.0	2371.0	2379.0	2224.7	2182.8	2158.5	2196.7	2096.7
57.5°	1900.4	1885.0	1999.0	2207.0	2459.9	2559.2	2485.6	2455.5	2387.1	2428.3	2361.4
60°	1791.6	1807.1	1918.8	2161.4	2497.4	2699.6	2747.4	2701.8	2622.4	2639.3	2646.6
62.5°	1627.0	1646.8	1763.0	2055.6	2467.3	2818.7	2989.2	2966.5	2859.9	2851.0	2864.3
65°	1392.4	1380.7	1510.1	1824.0	2324.6	2858.4	3226.7	3217.1	3090.0	2986.3	2991.4
67.5°	1004.3	993.2	1083.7	1407.9	1938.7	2710.6	3353.2	3374.5	3228.9	3045.9	2966.5
68°	911.6	896.2	986.6	1301.3	1839.4	2625.3	3346.5	3383.3	3239.2	3042.2	2935.6
70°	524.9	499.9	587.4	849.1	1354.2	2210.0	3211.3	3312.7	3214.9	2970.9	2733.4
72.5°	164.7	164.7	227.2	343.3	664.6	1398.3	2747.4	2920.1	2940.7	2700.3	2271.7
75°	102.9	102.9	118.4	162.5	264.7	593.3	1895.3	2158.5	2336.4	2273.2	1656.4
77.5°	69.8	68.4	78.7	100.7	147.8	190.4	951.3	1168.9	1429.2	1552.0	969.0
80°	38.2	39.0	48.5	60.3	83.8	88.2	279.4	394.8	629.3	737.4	367.6
82.5°	22.1	21.3	23.5	26.5	36.8	38.2	80.1	98.5	164.7	152.9	98.5
85°	0.0	0.7	0.7	0.7	1.5	3.7	10.3	15.4	25.0	34.6	24.3
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	1.5	1.5	1.5	1.5	2.2
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°	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3	632.3
2.5°	633.0	635.2	638.9	641.8	643.3	641.8	647.0	646.2	647.7	647.7	649.2
5°	639.6	642.5	649.2	652.8	656.5	658.0	663.9	665.3	668.3	669.7	669.0
7.5°	649.2	652.8	660.9	667.5	672.7	676.4	685.9	690.3	694.7	696.2	697.7
10°	666.8	672.0	680.8	688.9	696.2	701.4	709.4	715.3	719.7	721.2	722.7
12.5°	690.3	696.2	707.2	718.3	726.4	729.3	728.6	727.1	727.1	726.4	727.1
15°	717.5	723.4	737.4	747.7	748.4	738.9	725.6	719.0	717.5	717.5	718.3
17.5°	749.1	756.5	765.3	771.2	757.2	733.7	718.3	711.7	710.2	709.4	708.0
20°	785.2	789.6	792.5	785.2	754.3	727.1	709.4	699.9	692.5	691.8	688.9
22.5°	823.4	821.9	818.3	791.8	746.2	711.7	687.4	669.7	660.2	659.5	656.5
25°	851.3	845.5	834.4	793.3	731.5	686.7	652.1	624.2	611.7	605.8	607.3
27.5°	869.7	857.2	838.1	785.9	705.8	648.4	599.9	563.1	544.8	541.8	544.0
30°	891.8	871.9	841.0	767.5	669.0	594.8	531.5	494.8	484.5	479.3	480.8
32.5°	918.2	892.5	850.6	739.6	622.7	532.3	463.9	438.2	426.4	416.8	419.8
35°	952.8	920.4	866.0	699.9	563.9	466.1	415.4	391.9	370.5	360.2	361.0
37.5°	993.2	956.5	879.3	653.6	499.9	416.1	373.5	345.5	319.1	299.2	295.5
40°	1057.9	1027.8	890.3	602.1	438.9	374.9	332.3	300.7	275.7	255.8	253.6
42.5°	1166.0	1113.8	891.0	540.4	386.7	339.7	298.5	263.9	236.0	219.1	218.3
45°	1293.2	1212.3	875.6	474.2	341.1	304.4	268.3	229.4	213.2	202.2	200.7
47.5°	1443.9	1325.5	841.8	412.4	302.2	269.8	237.5	213.9	202.2	194.1	194.1
50°	1615.9	1458.6	808.0	359.5	264.7	241.9	219.8	207.3	198.5	191.1	190.4
52.5°	1810.0	1615.9	796.9	305.8	233.8	216.1	213.9	202.2	194.8	189.7	188.2
55°	2041.6	1792.4	807.2	263.9	209.5	205.9	210.3	200.7	195.6	187.5	185.3
57.5°	2309.2	1964.4	796.2	228.6	192.6	196.3	205.9	200.7	196.3	186.0	183.1
60°	2561.4	2118.1	721.2	199.2	176.4	184.5	200.0	194.1	187.5	185.3	183.8
62.5°	2696.6	2168.0	574.9	176.4	163.9	172.8	190.4	183.1	178.6	183.8	184.5
65°	2698.1	2111.4	422.7	159.5	153.7	162.5	180.9	178.6	181.6	193.4	195.6
67.5°	2548.1	1939.4	298.5	144.1	143.4	154.4	185.3	200.0	202.2	213.9	213.9
68°	2496.7	1896.8	277.2	141.9	141.2	154.4	188.9	203.6	205.1	216.1	215.4
70°	2214.4	1603.4	200.7	133.1	137.5	165.4	208.8	213.9	205.1	217.6	216.9
72.5°	1730.6	1185.8	150.0	123.5	130.9	163.2	210.3	205.1	191.9	194.8	191.1
75°	1169.7	755.8	123.5	113.2	116.2	138.2	191.1	193.4	177.9	175.0	170.6
77.5°	612.4	354.4	100.0	100.7	103.7	119.8	170.6	175.7	161.7	152.9	151.4
80°	225.7	140.4	81.6	89.0	90.4	105.1	146.3	154.4	141.2	134.5	133.1
82.5°	82.3	69.8	67.6	77.9	76.5	89.7	127.9	133.8	119.8	113.2	109.5
85°	22.8	25.7	42.6	61.0	59.5	69.8	102.9	108.1	96.3	79.4	77.2
87.5°	1.5	5.1	16.9	36.0	37.5	43.4	74.3	81.6	71.3	58.8	58.1
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)