

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: P401660

Luminaire Tested: **ENT-SA1E-735-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401660  
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-735-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6728 lumens  
Efficiency: N/A  
Efficacy: 117.6 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 - G2

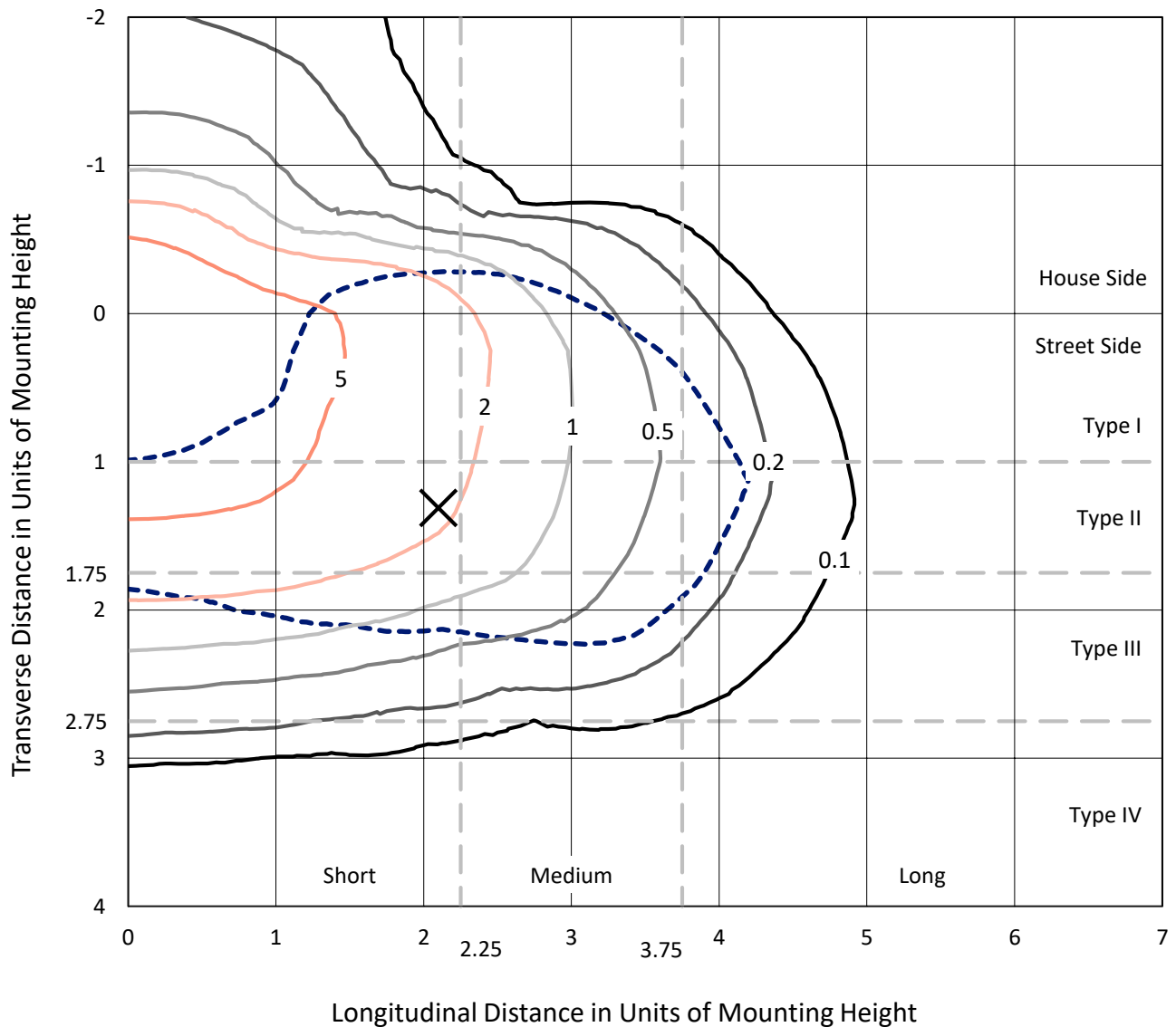
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

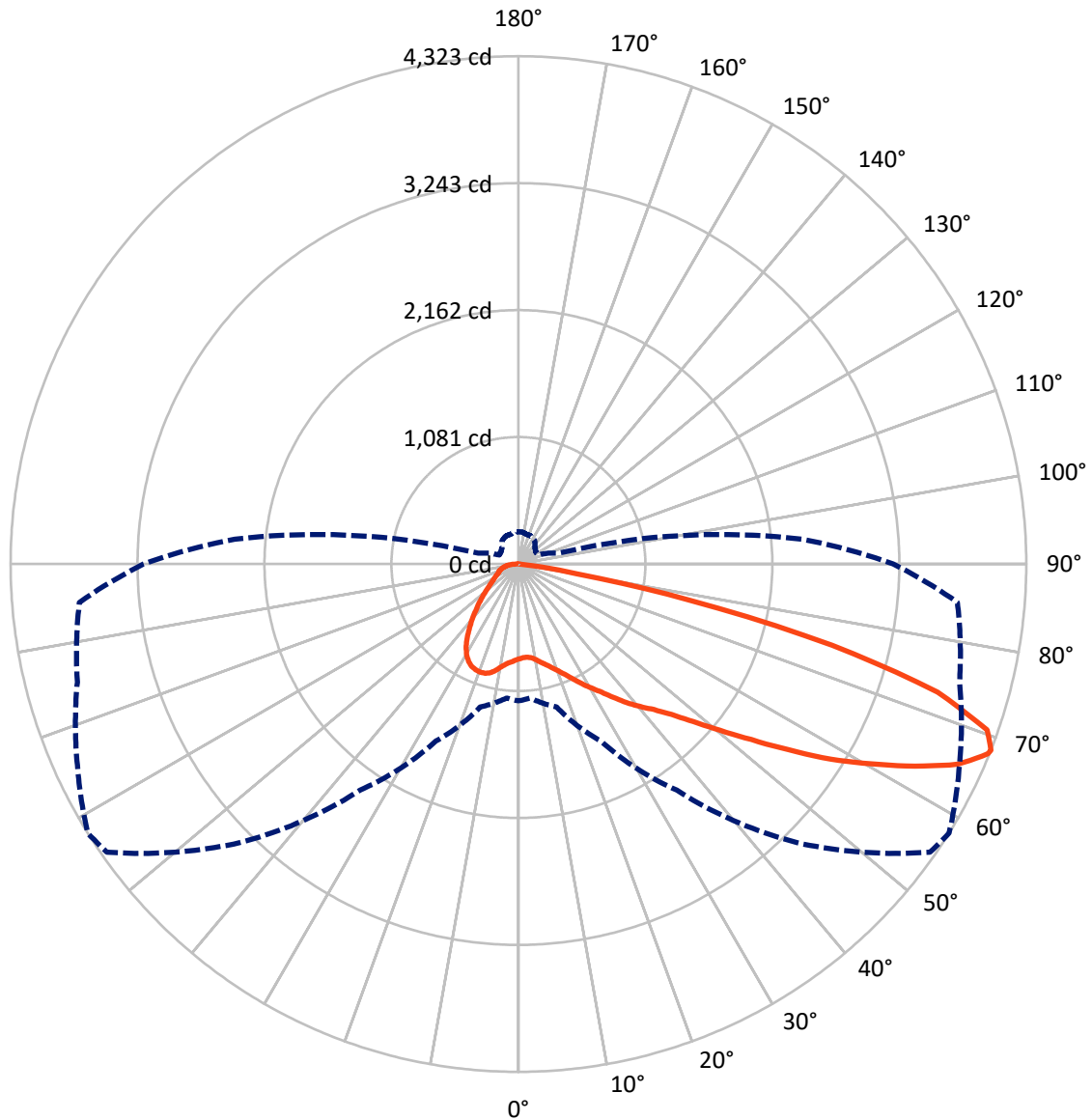
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 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	1575.3	0.0	1575.3
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	5152.7	0.0	5152.7
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	6728.0	0.0	6728.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	1.2
10°-20°	260.3	3.9
20°-30°	468.1	7.0
30°-40°	687.6	10.2
40°-50°	1008.5	15.0
50°-60°	1507.5	22.4
60°-70°	1762.7	26.2
70°-80°	869.1	12.9
80°-90°	84.8	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°	6728.0	100.0
0°-180°	6728.0	100.0



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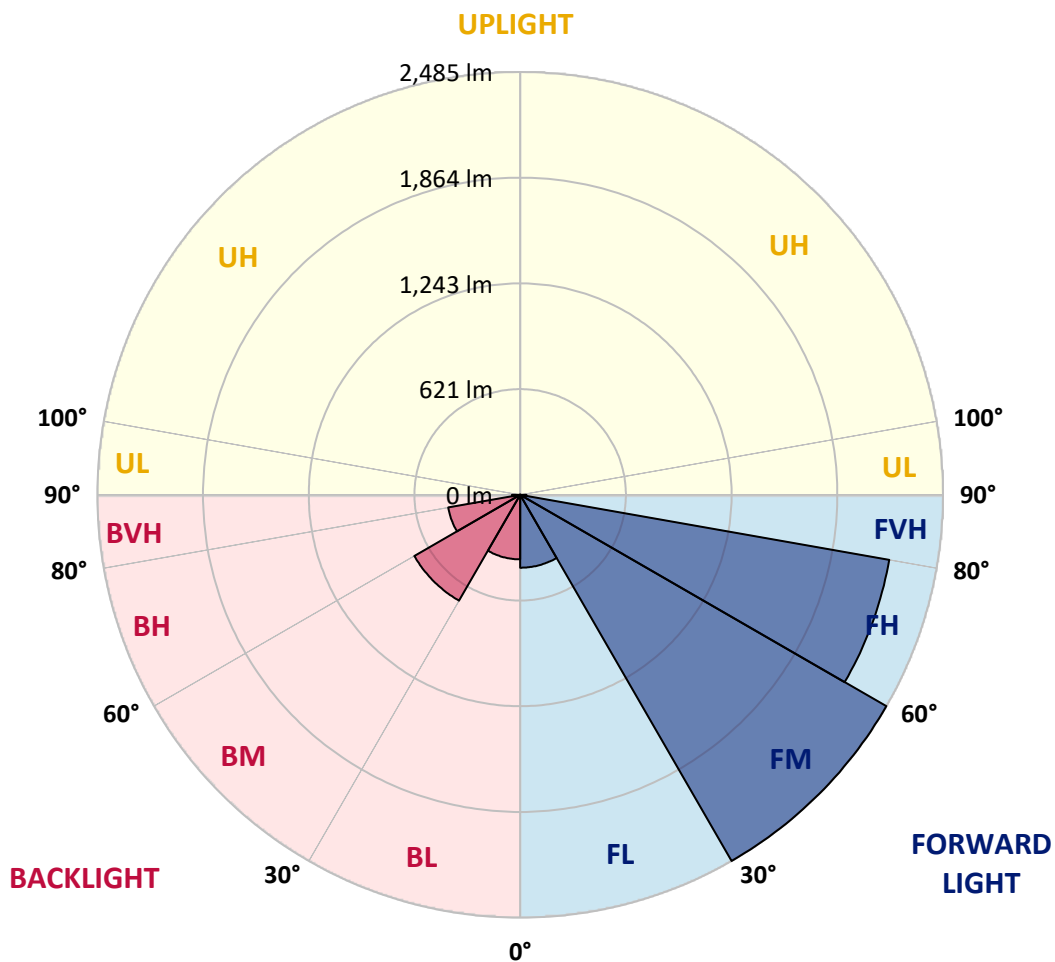
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	428.6	6.4			
FM	(30°-60°)	2485.1	36.9			
FH	(60°-80°)	2202.5	32.7			G2/5000
FVH	(80°-90°)	36.5	0.5			G1/100
BL	(0°-30°)	379.3	5.6	B1/500		
BM	(30°-60°)	718.5	10.7	B1/1000		
BH	(60°-80°)	429.2	6.4	B1/500		G1/500
BVH	(80°-90°)	48.3	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-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9
2.5°	788.2	788.2	791.0	792.0	793.8	795.7	797.6	798.5	801.4	805.1	807.0
5°	781.6	782.6	784.5	785.4	788.2	792.0	794.8	796.7	801.4	808.9	813.6
7.5°	796.7	799.5	800.4	801.4	802.3	805.1	805.1	806.1	810.8	818.3	824.9
10°	821.1	823.0	825.8	828.6	831.4	833.3	827.7	828.6	830.5	838.0	847.4
12.5°	852.1	852.1	853.0	856.8	859.6	865.2	859.6	859.6	859.6	866.2	877.5
15°	886.9	885.0	885.0	888.7	889.7	893.4	890.6	890.6	894.4	900.9	912.2
17.5°	926.3	929.1	926.3	924.4	921.6	923.5	925.4	927.3	934.8	945.1	951.7
20°	983.6	988.3	986.4	978.9	966.7	961.1	967.7	971.4	986.4	998.7	999.6
22.5°	1074.8	1071.9	1069.1	1056.0	1031.5	1016.5	1017.4	1023.1	1046.6	1065.4	1056.0
25°	1159.3	1162.1	1162.1	1143.3	1111.4	1080.4	1083.2	1086.0	1109.5	1126.4	1101.1
27.5°	1261.7	1259.8	1258.9	1233.5	1195.0	1164.9	1149.0	1156.5	1173.4	1180.0	1131.1
30°	1367.9	1375.4	1367.9	1332.2	1295.5	1257.0	1225.1	1223.2	1231.6	1230.7	1166.8
32.5°	1495.6	1489.1	1486.2	1444.9	1398.9	1348.1	1307.7	1301.2	1296.5	1289.9	1209.1
35°	1594.3	1602.7	1602.7	1567.0	1512.5	1462.8	1399.8	1394.2	1382.9	1361.3	1264.5
37.5°	1710.8	1708.9	1715.5	1674.1	1619.6	1571.7	1513.5	1497.5	1472.1	1440.2	1330.3
40°	1824.4	1829.1	1844.2	1794.4	1744.6	1707.0	1624.3	1595.2	1556.7	1527.6	1426.1
42.5°	1979.5	1986.0	1991.7	1950.3	1891.1	1857.3	1729.6	1692.9	1671.3	1665.7	1552.9
45°	2167.4	2178.6	2183.3	2145.7	2111.9	2031.1	1862.0	1828.2	1804.7	1829.1	1725.8
47.5°	2347.7	2342.1	2363.7	2362.8	2366.5	2269.8	2052.7	2002.0	1979.5	2041.5	1924.0
50°	2449.2	2457.6	2504.6	2552.5	2619.2	2549.7	2273.5	2222.8	2196.5	2273.5	2157.0
52.5°	2501.8	2513.1	2576.0	2710.4	2852.2	2819.3	2539.4	2483.0	2460.5	2535.6	2406.9
55°	2506.5	2513.1	2597.6	2806.2	3029.8	3040.1	2842.8	2789.3	2758.3	2807.1	2679.4
57.5°	2428.5	2408.8	2554.4	2820.3	3143.5	3270.3	3176.3	3137.8	3050.4	3103.1	3017.6
60°	2289.5	2309.2	2452.0	2762.0	3191.4	3449.7	3510.8	3452.5	3351.1	3372.7	3382.1
62.5°	2079.0	2104.4	2252.8	2626.7	3152.9	3601.9	3819.9	3790.7	3654.5	3643.3	3660.2
65°	1779.4	1764.3	1929.7	2330.8	2970.6	3652.6	4123.3	4111.1	3948.6	3816.1	3822.7
67.5°	1283.3	1269.2	1384.8	1799.1	2477.4	3463.8	4284.9	4312.2	4126.1	3892.2	3790.7
68°	1164.9	1145.2	1260.8	1662.9	2350.5	3354.8	4276.5	4323.4	4139.3	3887.5	3751.3
70°	670.8	638.8	750.6	1085.1	1730.5	2824.0	4103.6	4233.2	4108.3	3796.4	3492.9
72.5°	210.4	210.4	290.3	438.7	849.3	1786.9	3510.8	3731.6	3757.9	3450.7	2903.0
75°	131.5	131.5	151.3	207.6	338.2	758.1	2421.9	2758.3	2985.6	2904.8	2116.6
77.5°	89.2	87.4	100.5	128.7	188.8	243.3	1215.7	1493.8	1826.3	1983.2	1238.2
80°	48.9	49.8	62.0	77.0	107.1	112.7	357.0	504.5	804.2	942.3	469.7
82.5°	28.2	27.2	30.1	33.8	47.0	48.9	102.4	125.9	210.4	195.4	125.9
85°	0.0	0.9	0.9	0.9	1.9	4.7	13.2	19.7	31.9	44.2	31.0
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	1.9	1.9	1.9	1.9	2.8
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°	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9	807.9
2.5°	808.9	811.7	816.4	820.2	822.0	820.2	826.7	825.8	827.7	827.7	829.5
5°	817.3	821.1	829.5	834.2	838.9	840.8	848.3	850.2	854.0	855.9	854.9
7.5°	829.5	834.2	844.6	853.0	859.6	864.3	876.5	882.2	887.8	889.7	891.6
10°	852.1	858.7	869.9	880.3	889.7	896.3	906.6	914.1	919.7	921.6	923.5
12.5°	882.2	889.7	903.8	917.9	928.2	932.0	931.0	929.1	929.1	928.2	929.1
15°	916.9	924.4	942.3	955.4	956.4	944.2	927.3	918.8	916.9	916.9	917.9
17.5°	957.3	966.7	978.0	985.5	967.7	937.6	917.9	909.4	907.5	906.6	904.7
20°	1003.4	1009.0	1012.7	1003.4	963.9	929.1	906.6	894.4	885.0	884.0	880.3
22.5°	1052.2	1050.3	1045.6	1011.8	953.6	909.4	878.4	855.9	843.6	842.7	838.9
25°	1087.9	1080.4	1066.3	1013.7	934.8	877.5	833.3	797.6	781.6	774.1	776.0
27.5°	1111.4	1095.4	1071.0	1004.3	901.9	828.6	766.6	719.6	696.1	692.4	695.2
30°	1139.6	1114.2	1074.8	980.8	854.9	760.0	679.2	632.3	619.1	612.5	614.4
32.5°	1173.4	1140.5	1087.0	945.1	795.7	680.2	592.8	559.9	544.9	532.7	536.4
35°	1217.5	1176.2	1106.7	894.4	720.6	595.6	530.8	500.7	473.5	460.3	461.3
37.5°	1269.2	1222.2	1123.6	835.2	638.8	531.7	477.2	441.5	407.7	382.4	377.7
40°	1351.9	1313.4	1137.7	769.4	560.9	479.1	424.6	384.2	352.3	326.9	324.1
42.5°	1490.0	1423.3	1138.6	690.5	494.2	434.0	381.4	337.3	301.6	280.0	279.0
45°	1652.5	1549.2	1118.9	606.0	435.9	388.9	342.9	293.1	272.4	258.4	256.5
47.5°	1845.1	1693.9	1075.7	527.0	386.1	344.8	303.4	273.4	258.4	248.0	248.0
50°	2064.9	1863.9	1032.5	459.4	338.2	309.1	280.9	264.9	253.7	244.3	243.3
52.5°	2313.0	2064.9	1018.4	390.8	298.8	276.2	273.4	258.4	249.0	242.4	240.5
55°	2608.9	2290.4	1031.5	337.3	267.7	263.1	268.7	256.5	249.9	239.6	236.7
57.5°	2950.9	2510.3	1017.4	292.2	246.1	250.8	263.1	256.5	250.8	237.7	233.9
60°	3273.1	2706.6	921.6	254.6	225.5	235.8	255.5	248.0	239.6	236.7	234.9
62.5°	3446.0	2770.5	734.7	225.5	209.5	220.8	243.3	233.9	228.3	234.9	235.8
65°	3447.8	2698.1	540.2	203.9	196.3	207.6	231.1	228.3	232.0	247.1	249.9
67.5°	3256.2	2478.3	381.4	184.1	183.2	197.3	236.7	255.5	258.4	273.4	273.4
68°	3190.4	2423.8	354.2	181.3	180.4	197.3	241.4	260.2	262.1	276.2	275.3
70°	2829.7	2049.0	256.5	170.0	175.7	211.4	266.8	273.4	262.1	278.1	277.1
72.5°	2211.5	1515.4	191.7	157.8	167.2	208.6	268.7	262.1	245.2	249.0	244.3
75°	1494.7	965.8	157.8	144.7	148.4	176.6	244.3	247.1	227.4	223.6	218.0
77.5°	782.6	452.8	127.8	128.7	132.5	153.1	218.0	224.5	206.7	195.4	193.5
80°	288.4	179.4	104.3	113.7	115.6	134.3	187.0	197.3	180.4	171.9	170.0
82.5°	105.2	89.2	86.4	99.6	97.7	114.6	163.5	171.0	153.1	144.7	140.0
85°	29.1	32.9	54.5	78.0	76.1	89.2	131.5	138.1	123.1	101.5	98.6
87.5°	1.9	6.6	21.6	46.0	47.9	55.4	94.9	104.3	91.1	75.2	74.2
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)