

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: P401664

Luminaire Tested: **ENT-SA1E-735-U-T4W**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1E-735-U-T4W
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6608 lumens
Efficiency: N/A
Efficacy: 115.5 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 - 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

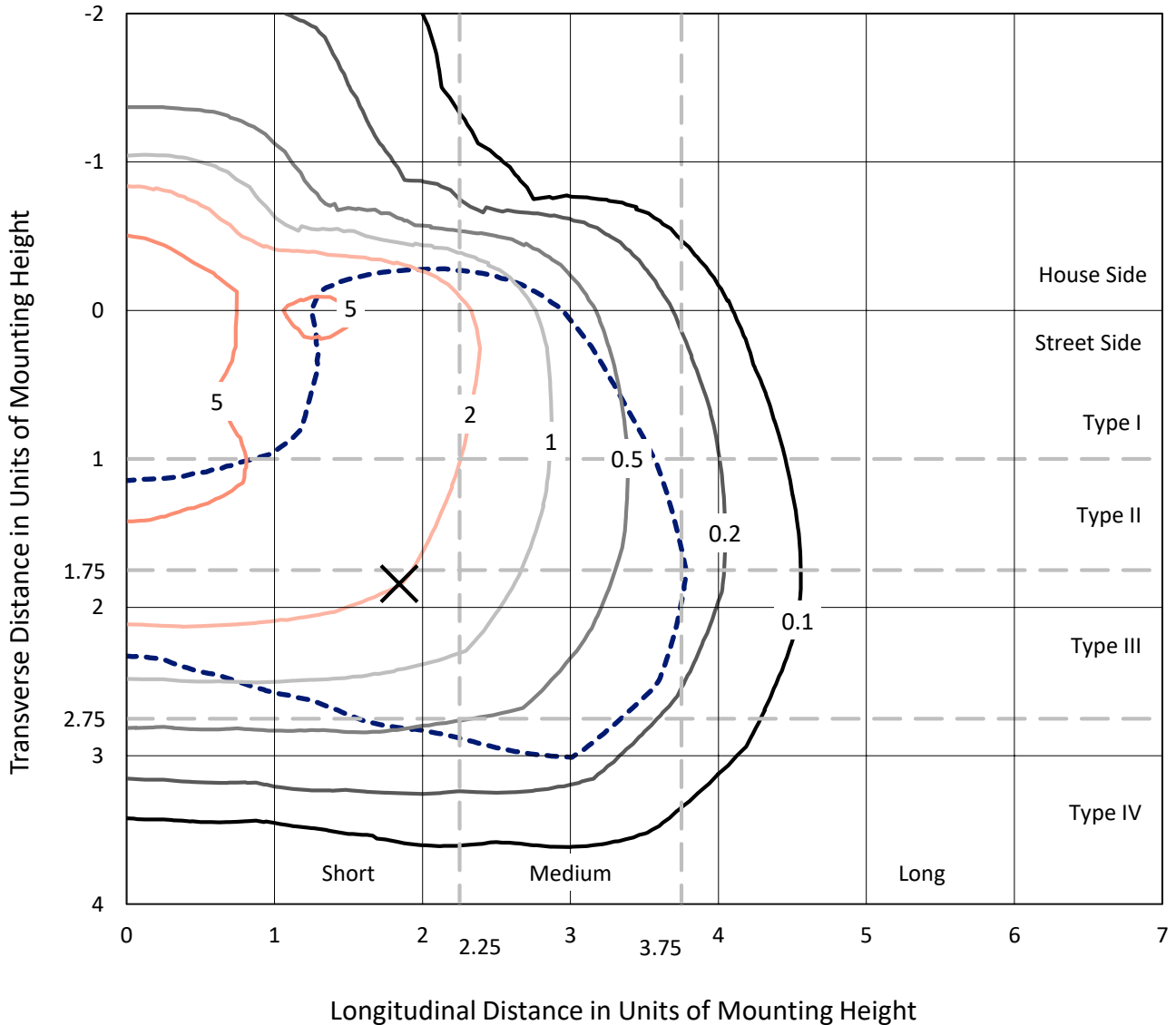


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

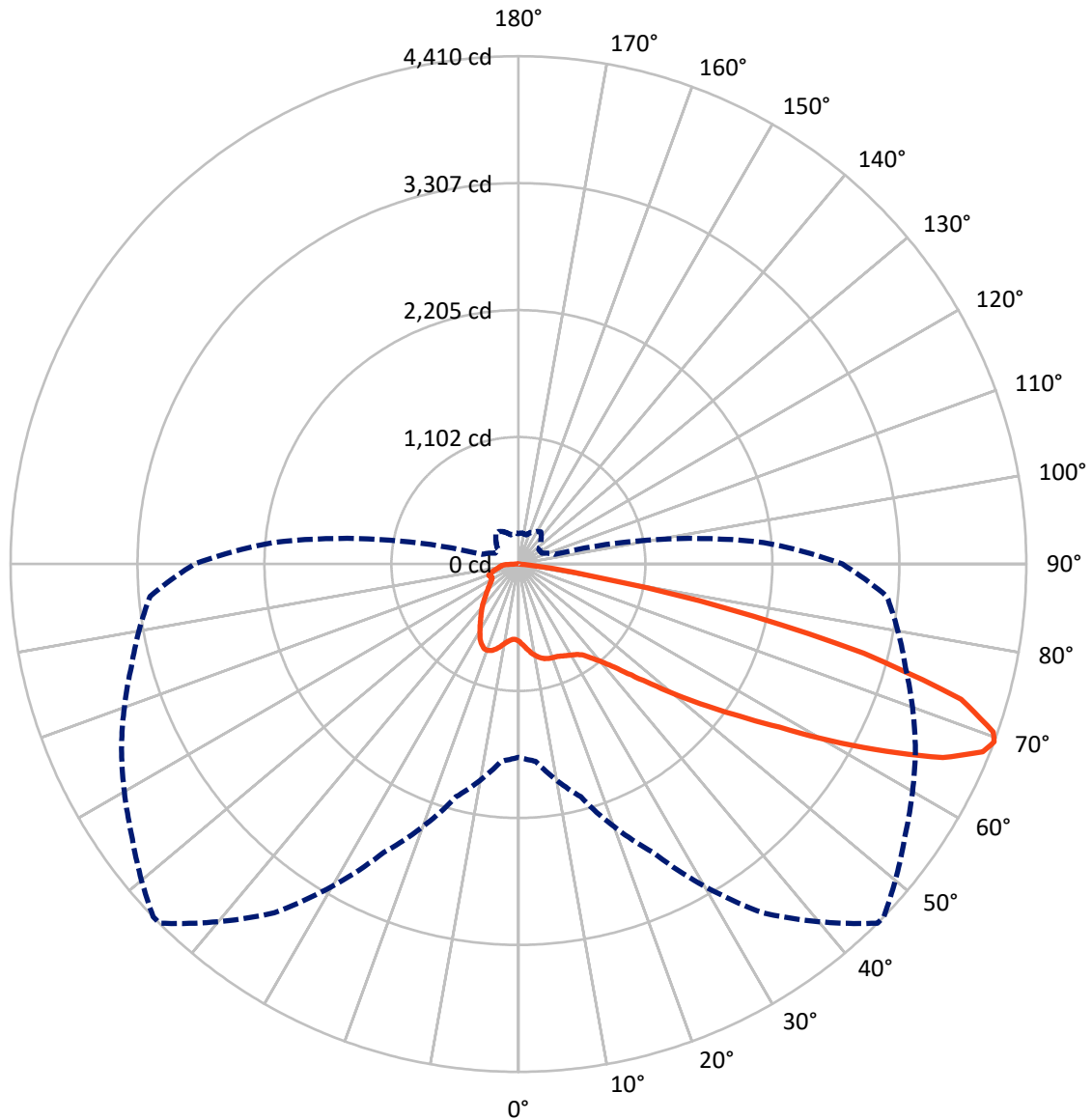


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1555.8	0.0	1555.8
	% Fixture	23.5	0.0	23.5
Street Side	Lumens	5052.2	0.0	5052.2
	% Fixture	76.5	0.0	76.5
Total	Lumens	6608.0	0.0	6608.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	1.0
10°-20°	226.5	3.4
20°-30°	382.7	5.8
30°-40°	553.7	8.4
40°-50°	836.0	12.7
50°-60°	1409.7	21.3
60°-70°	1939.4	29.3
70°-80°	1074.7	16.3
80°-90°	117.0	1.8
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°	6608.0	100.0
0°-180°	6608.0	100.0



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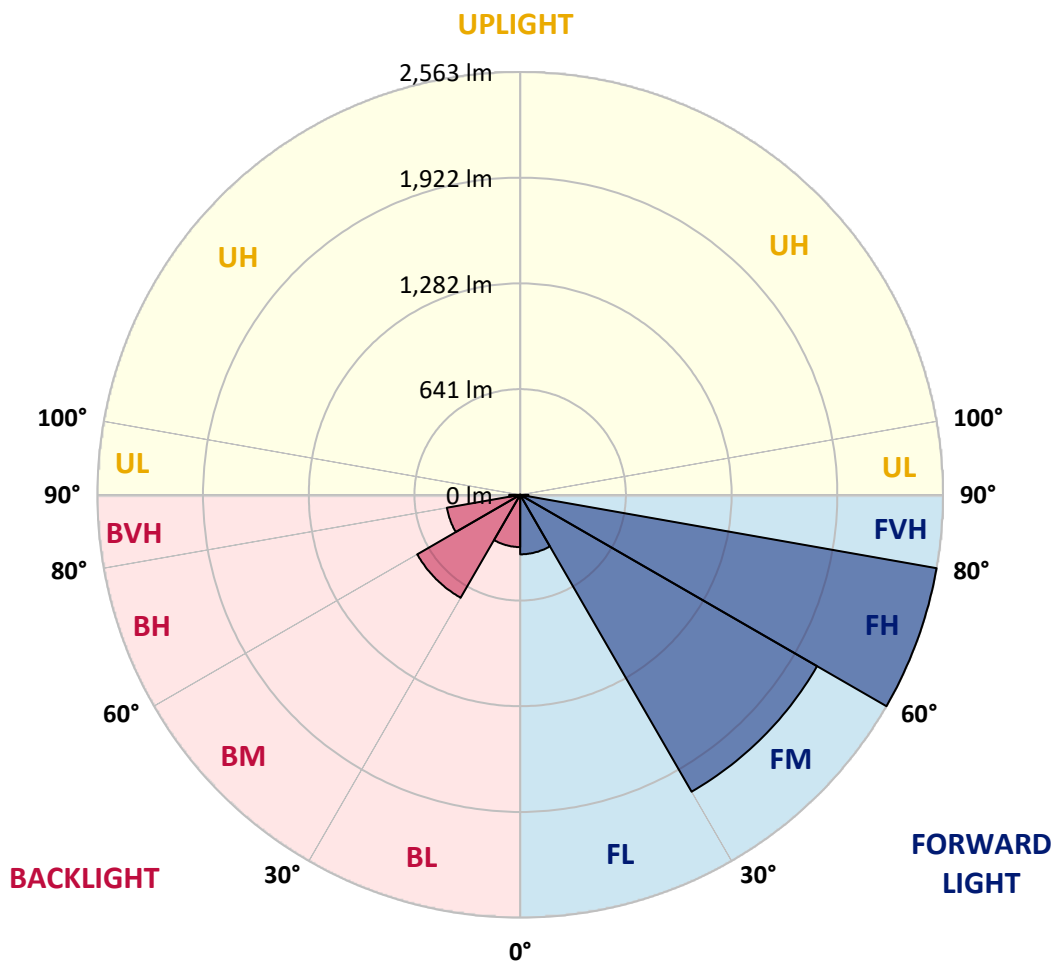
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	360.7	5.5			
FM	(30°-60°)	2078.3	31.5			
FH	(60°-80°)	2563.2	38.8			G2/5000
FVH	(80°-90°)	50.1	0.8			G1/100
BL	(0°-30°)	316.8	4.8	B1/500		
BM	(30°-60°)	721.2	10.9	B1/1000		
BH	(60°-80°)	450.9	6.8	B1/500		G1/500
BVH	(80°-90°)	66.9	1.0			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7
2.5°	713.0	712.1	713.0	709.2	705.5	699.8	698.0	691.4	686.7	680.1	674.5
5°	765.6	768.4	767.5	762.8	747.8	736.5	736.5	722.4	707.4	693.3	680.1
7.5°	822.9	822.9	817.3	807.9	792.8	775.9	774.1	755.3	733.7	713.9	693.3
10°	864.2	866.1	857.7	844.5	825.7	807.9	806.0	784.4	763.7	738.4	713.0
12.5°	893.4	893.4	885.8	873.6	851.1	834.2	832.3	812.6	791.0	764.7	735.5
15°	908.4	906.5	899.9	886.8	867.1	853.0	850.2	833.2	815.4	789.1	758.1
17.5°	905.6	905.6	899.9	886.8	872.7	861.4	859.5	847.3	834.2	808.8	777.8
20°	893.4	892.4	890.5	880.2	870.8	866.1	864.2	858.6	850.2	828.5	799.4
22.5°	882.1	881.2	878.3	871.8	868.0	870.8	870.8	869.9	868.9	852.0	823.8
25°	888.7	887.7	882.1	872.7	871.8	884.9	885.8	888.7	890.5	876.5	847.3
27.5°	934.7	931.9	915.9	891.5	883.0	899.9	901.8	910.3	908.4	893.4	868.0
30°	1024.9	1025.8	990.1	937.5	909.3	916.8	917.8	927.2	924.4	912.2	891.5
32.5°	1161.1	1161.1	1102.8	1023.0	951.6	936.6	933.8	942.2	953.5	937.5	916.8
35°	1333.9	1329.2	1258.8	1135.7	1023.9	970.4	968.5	964.8	984.5	969.5	939.4
37.5°	1507.7	1490.8	1422.2	1287.0	1125.4	1036.2	1028.6	1017.4	1028.6	996.7	970.4
40°	1647.7	1644.9	1588.5	1451.4	1245.6	1116.0	1110.4	1060.6	1068.1	1042.7	1032.4
42.5°	1801.8	1803.6	1766.1	1628.0	1389.4	1224.0	1209.0	1132.0	1153.6	1144.2	1139.5
45°	1970.8	1969.0	1940.8	1796.1	1565.0	1374.3	1355.5	1260.7	1304.8	1299.2	1325.5
47.5°	2100.5	2110.8	2094.8	1992.5	1773.6	1556.6	1542.5	1426.9	1493.6	1538.7	1588.5
50°	2277.1	2276.2	2232.9	2190.7	2015.9	1789.5	1775.5	1646.8	1742.6	1808.3	1899.5
52.5°	2496.0	2488.5	2399.2	2384.2	2310.9	2044.1	2031.9	1897.6	2034.7	2092.0	2277.1
55°	2633.1	2632.2	2586.2	2612.5	2614.3	2327.8	2312.8	2193.5	2348.5	2414.2	2694.2
57.5°	2747.7	2748.7	2787.2	2879.2	2941.2	2672.6	2666.9	2521.3	2678.2	2770.3	3100.9
60°	2836.0	2854.8	2962.8	3173.3	3276.6	3112.2	3087.8	2933.7	3038.9	3075.6	3411.9
62.5°	2800.3	2824.8	3037.1	3347.1	3612.9	3578.2	3569.7	3347.1	3346.1	3327.3	3643.9
65°	2518.5	2571.1	2905.5	3340.5	3834.6	4051.6	4039.4	3736.9	3631.7	3537.8	3713.4
67.5°	2061.0	2072.3	2475.3	3085.0	3832.7	4349.4	4336.2	4020.6	3809.2	3579.1	3509.6
69°	1677.8	1719.1	2092.0	2761.8	3697.5	4409.5	4409.5	4099.5	3802.7	3480.5	3210.8
70°	1451.4	1453.2	1813.0	2504.4	3513.3	4373.8	4382.3	4099.5	3749.1	3351.8	2945.9
72.5°	680.1	722.4	949.7	1634.5	2837.9	4020.6	4041.3	3829.0	3438.2	2887.7	2210.4
75°	203.8	211.4	316.6	775.0	1626.1	3097.2	3143.2	3185.5	2800.3	2125.8	1361.2
77.5°	121.2	120.2	153.1	263.0	752.5	1836.5	1857.2	2037.5	1816.8	1181.8	618.1
80°	59.2	61.1	81.7	127.8	281.8	667.0	733.7	952.5	805.1	462.2	226.4
82.5°	19.7	21.6	33.8	51.7	119.3	215.1	237.7	298.7	257.4	168.2	96.8
85°	0.0	0.0	0.9	1.9	6.6	16.0	16.0	35.7	53.5	59.2	31.9
87.5°	0.0	0.0	0.9	0.9	1.9	1.9	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°	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7	670.7
2.5°	671.7	669.8	666.0	662.3	660.4	655.7	656.6	654.8	653.8	653.8	654.8
5°	673.5	670.7	665.1	661.3	657.6	655.7	660.4	662.3	664.2	664.2	665.1
7.5°	684.8	679.2	672.6	667.9	668.8	671.7	679.2	684.8	687.6	689.5	691.4
10°	703.6	697.0	687.6	686.7	688.6	696.1	706.4	714.9	722.4	727.1	727.1
12.5°	723.3	714.9	707.4	709.2	717.7	729.0	739.3	748.7	755.3	760.0	760.9
15°	744.9	736.5	729.0	733.7	747.8	760.9	770.3	774.1	776.9	781.6	782.5
17.5°	764.7	757.2	750.6	762.8	775.0	785.3	788.2	786.3	782.5	785.3	787.2
20°	785.3	778.8	775.0	788.2	796.6	797.5	790.0	781.6	772.2	772.2	773.1
22.5°	810.7	802.2	800.4	806.9	804.1	792.8	774.1	760.9	747.8	745.9	748.7
25°	835.1	826.7	825.7	821.0	796.6	767.5	742.1	727.1	716.8	717.7	723.3
27.5°	859.5	853.9	854.8	829.5	775.0	730.8	697.0	684.8	687.6	689.5	695.2
30°	884.0	884.0	887.7	829.5	744.9	679.2	647.2	646.3	653.8	659.5	666.0
32.5°	912.2	920.6	914.0	819.2	704.5	626.6	601.2	603.1	611.5	620.9	626.6
35°	939.4	959.1	940.3	795.7	649.1	578.7	558.0	555.2	561.8	570.2	573.0
37.5°	982.6	1014.5	962.9	759.0	591.8	536.4	515.7	508.2	501.6	508.2	507.3
40°	1057.8	1096.3	979.8	698.0	536.4	496.9	475.3	461.2	445.3	431.2	431.2
42.5°	1178.0	1203.4	989.2	623.8	481.0	457.5	435.9	415.2	390.8	365.4	365.4
45°	1374.3	1380.0	992.9	544.8	430.2	418.0	395.5	375.8	343.8	318.5	312.8
47.5°	1636.4	1612.0	1002.3	468.8	386.1	383.3	364.5	341.9	307.2	283.7	280.9
50°	1988.7	1883.5	1043.7	407.7	350.4	353.2	339.1	312.8	279.9	263.0	259.3
52.5°	2385.1	2226.4	1075.6	358.8	319.4	327.8	317.5	292.2	264.0	249.9	247.1
55°	2818.2	2556.1	1068.1	326.0	295.9	305.3	301.5	279.9	254.6	242.4	239.5
57.5°	3171.4	2788.1	1002.3	296.8	272.4	285.6	289.3	272.4	248.9	237.7	234.8
60°	3436.3	2914.9	867.1	272.4	253.6	269.6	279.9	267.7	248.0	241.4	238.6
62.5°	3556.5	2903.7	691.4	253.6	239.5	258.3	280.9	275.2	262.1	266.8	267.7
65°	3488.9	2761.8	518.5	239.5	231.1	260.2	296.8	296.8	277.1	285.6	286.5
67.5°	3142.3	2390.8	377.6	229.2	222.6	269.6	326.9	308.1	270.5	277.1	274.3
69°	2812.5	2139.0	324.1	223.6	216.1	274.3	340.1	310.0	263.0	270.5	263.0
70°	2570.2	1911.7	291.2	218.9	213.2	274.3	343.8	308.1	259.3	264.9	256.5
72.5°	1829.0	1327.4	239.5	209.5	202.9	253.6	337.2	297.8	248.9	242.4	226.4
75°	1063.4	733.7	203.8	199.2	179.4	222.6	320.3	286.5	238.6	226.4	215.1
77.5°	446.2	327.8	173.8	181.3	158.8	198.2	299.7	275.2	226.4	209.5	203.8
80°	181.3	163.5	144.7	156.9	138.1	174.7	276.2	256.5	208.5	191.6	183.2
82.5°	94.9	90.2	110.8	126.8	114.6	160.6	260.2	243.3	193.5	176.6	166.3
85°	28.2	37.6	62.9	86.4	87.4	144.7	252.7	225.5	168.2	145.6	143.7
87.5°	1.9	7.5	21.6	45.1	57.3	110.8	204.8	185.1	136.2	114.6	115.5
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)