

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: McGRAW-EDISON

Report Number: P301144

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194839)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-T3R-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5129.9 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 44
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

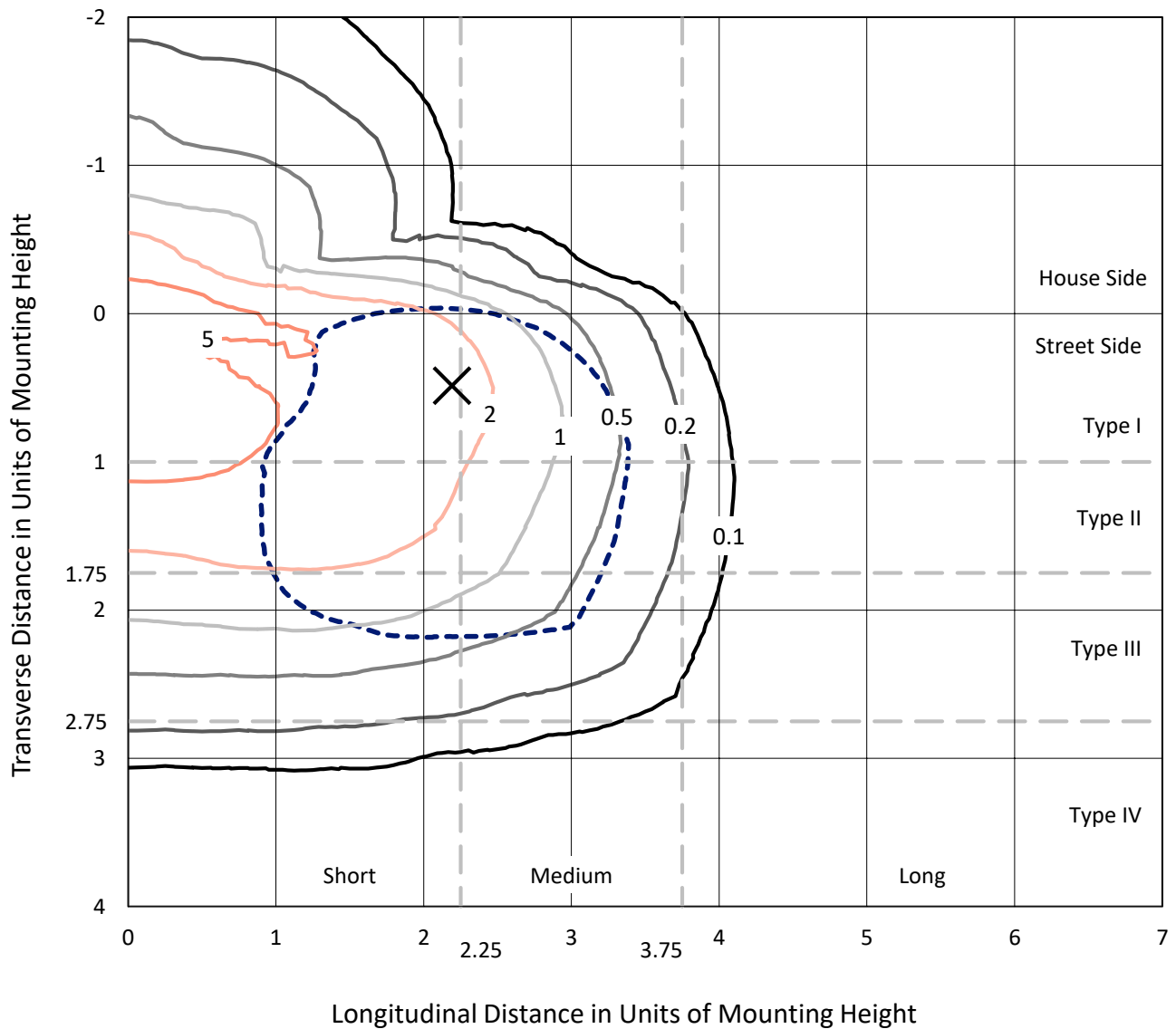


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Iso-Footcandle Lines of Horizontal Illumination

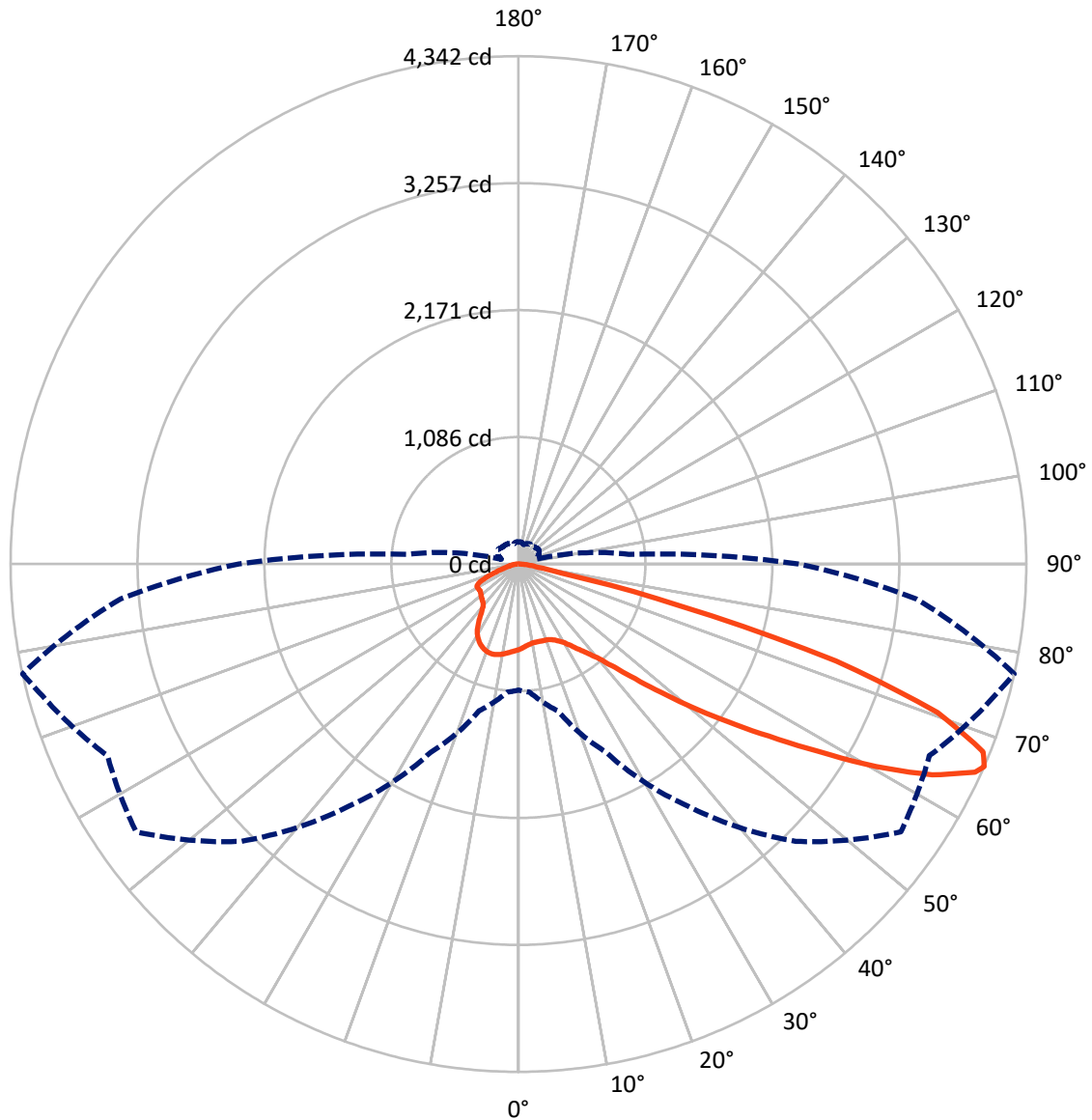
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	876.4	0.0	876.4
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	4253.5	0.0	4253.5
	% Fixture	82.9	0.0	82.9
Total	Lumens	5129.9	0.0	5129.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.3
10°-20°	184.3	3.6
20°-30°	314.5	6.1
30°-40°	503.4	9.8
40°-50°	777.7	15.2
50°-60°	1103.1	21.5
60°-70°	1475.6	28.8
70°-80°	640.8	12.5
80°-90°	65.3	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°	5129.9	100.0
0°-180°	5129.9	100.0



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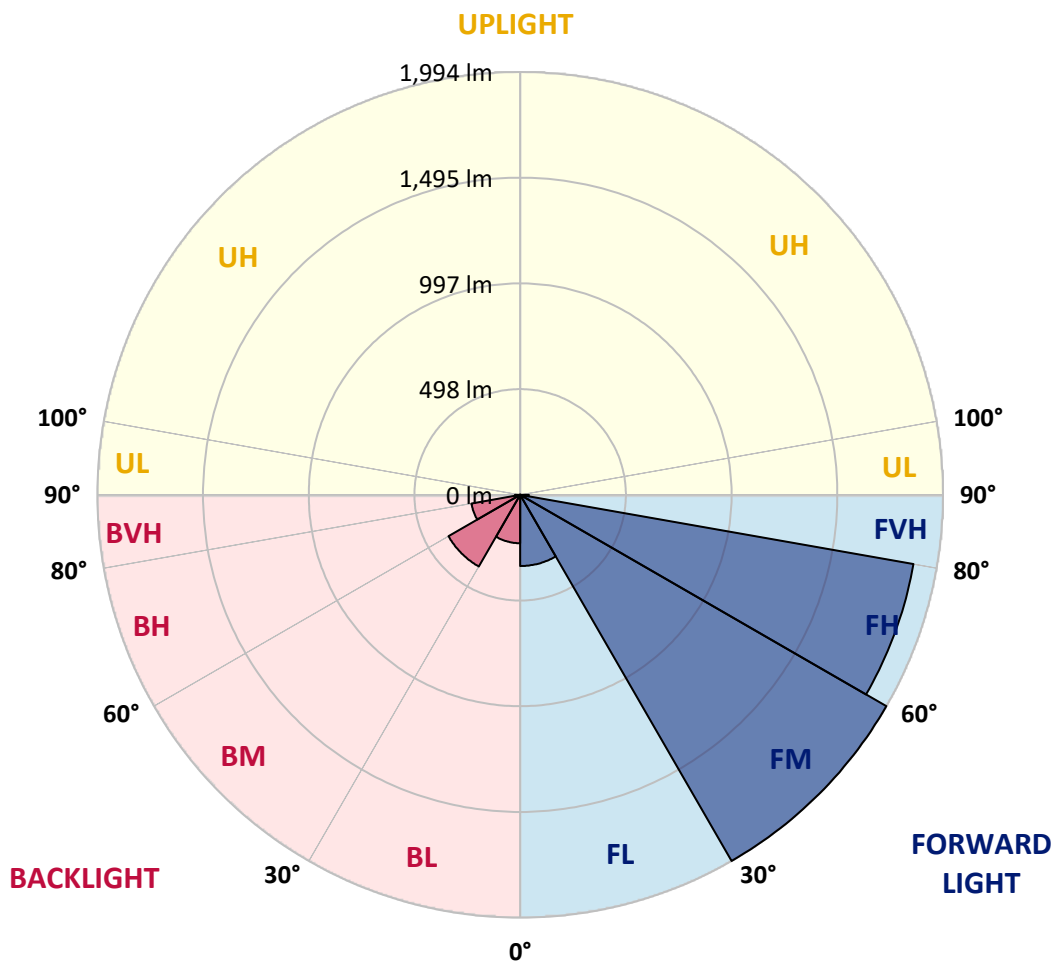
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	335.8	6.5			
FM	(30°-60°)	1993.8	38.9			
FH	(60°-80°)	1883.0	36.7			G2/5000
FVH	(80°-90°)	41.0	0.8			G1/100
BL	(0°-30°)	228.3	4.4	B1/500		
BM	(30°-60°)	390.4	7.6	B1/1000		
BH	(60°-80°)	233.4	4.6	B1/500		G1/500
BVH	(80°-90°)	24.4	0.5			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°	65°	75°	77.5°	85°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	646.7	651.0	654.7	658.1	664.8	676.0	688.8	699.3	714.3	717.2	725.2
5°	587.3	587.3	590.2	595.3	604.5	621.2	638.7	662.0	694.7	702.4	723.8
7.5°	558.5	558.7	560.4	564.7	572.7	588.0	607.2	634.6	678.9	691.8	728.1
10°	569.1	566.7	563.0	560.9	562.1	571.0	589.2	619.8	669.2	685.7	737.9
12.5°	628.7	624.2	611.6	594.8	578.8	572.3	582.9	612.7	665.1	684.3	750.7
15°	726.2	724.3	700.7	666.1	627.3	594.8	587.6	610.1	665.6	686.0	766.0
17.5°	848.4	845.7	814.7	764.3	701.0	637.8	603.8	612.3	667.3	688.8	780.7
20°	971.7	963.5	930.1	870.0	788.7	696.1	630.7	617.9	669.5	692.0	796.3
22.5°	1063.9	1057.0	1027.0	968.6	875.0	763.8	666.8	627.6	676.5	701.2	815.4
25°	1144.8	1145.2	1115.4	1059.0	962.3	835.5	713.3	653.5	694.4	720.1	841.6
27.5°	1244.9	1239.1	1211.2	1155.2	1048.6	908.0	769.6	689.1	721.1	747.0	876.0
30°	1364.6	1360.5	1328.3	1264.8	1144.3	985.8	833.8	730.5	755.5	782.4	921.0
32.5°	1505.4	1503.5	1470.1	1388.4	1254.8	1077.4	909.2	785.3	806.9	834.8	985.8
35°	1670.8	1671.0	1631.5	1533.3	1375.8	1184.1	994.7	855.9	869.4	898.5	1062.9
37.5°	1772.6	1784.9	1770.2	1670.0	1512.7	1303.3	1105.8	949.4	940.7	970.1	1145.5
40°	1794.4	1809.4	1856.2	1805.3	1665.9	1434.7	1204.2	1039.3	1028.5	1064.3	1251.9
42.5°	1763.8	1784.7	1883.6	1919.4	1828.6	1596.6	1336.5	1172.9	1159.1	1207.3	1384.3
45°	1745.6	1761.2	1875.6	1978.9	1969.6	1779.6	1505.0	1340.6	1335.5	1398.8	1537.0
47.5°	1714.2	1728.2	1838.3	1992.7	2052.6	1947.3	1707.4	1545.7	1555.6	1638.6	1709.3
50°	1731.1	1736.9	1796.6	1957.5	2076.6	2070.2	1933.5	1783.2	1817.2	1920.7	1904.5
52.5°	1728.7	1743.7	1791.7	1899.8	2079.7	2146.1	2156.3	2048.2	2119.7	2238.4	2120.9
55°	1397.6	1425.2	1734.8	1885.3	2090.8	2220.5	2354.6	2327.4	2460.7	2599.1	2365.2
57.5°	1334.6	1352.1	1523.6	1915.8	2149.9	2362.6	2575.1	2634.8	2857.7	3018.4	2662.9
60°	1322.2	1343.8	1521.4	1953.2	2269.9	2594.0	2902.1	3006.8	3340.8	3516.8	3008.0
62.5°	1283.7	1306.9	1507.1	1948.3	2440.3	2914.2	3320.7	3402.4	3798.9	3970.1	3296.7
65°	1161.5	1183.3	1390.6	1870.0	2555.3	3256.0	3816.1	3765.0	4160.6	4289.2	3440.6
66°	1077.9	1099.2	1298.7	1777.9	2528.6	3352.9	3991.6	3877.2	4241.5	4342.4	3412.5
67.5°	924.9	941.7	1120.3	1571.6	2386.8	3380.1	4139.2	3961.6	4250.0	4285.6	3251.9
70°	584.4	589.2	728.1	1084.9	1806.8	2931.4	3914.5	3752.2	3899.5	3803.0	2726.1
72.5°	253.6	251.9	349.6	551.9	1022.9	1967.0	3166.5	3096.0	3058.9	2838.8	1908.3
75°	141.1	143.0	181.6	256.2	415.7	966.2	2071.4	1982.2	1673.6	1428.2	865.3
77.5°	113.2	115.9	150.5	181.8	186.6	336.9	969.3	788.7	474.8	381.0	240.4
80°	89.5	94.3	131.4	141.6	125.8	138.9	313.2	250.4	187.9	172.3	124.6
82.5°	70.7	74.2	112.7	107.1	88.0	93.6	150.0	146.2	122.2	111.3	72.0
85°	50.9	57.2	92.6	80.7	57.7	63.0	99.6	95.5	70.0	57.2	31.8
87.5°	20.8	27.2	65.5	53.6	32.2	29.4	49.7	46.7	33.2	24.2	15.8
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°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	730.3	736.1	743.7	748.3	750.7	752.4	755.0	754.8	755.5	755.8	756.7
5°	735.1	744.8	755.8	758.7	758.7	756.0	753.3	748.9	747.3	746.8	747.3
7.5°	747.8	758.4	767.9	764.5	757.2	746.5	732.7	720.6	714.1	711.9	711.4
10°	763.8	776.6	780.5	767.7	746.3	720.6	693.2	673.3	662.0	658.8	657.9
12.5°	783.1	795.2	790.0	762.8	723.3	681.9	644.0	612.3	588.5	581.0	580.5
15°	804.5	814.0	795.2	747.8	688.8	627.8	560.4	505.7	476.1	466.6	465.9
17.5°	824.4	829.2	792.1	721.6	638.2	539.3	449.9	407.7	397.6	400.0	400.4
20°	841.3	841.3	781.5	684.0	558.5	422.7	366.2	365.6	372.8	380.1	381.6
22.5°	860.0	848.8	762.8	630.9	445.5	345.9	337.7	344.4	352.6	360.6	361.9
25°	883.0	854.9	736.8	550.5	350.2	314.1	317.3	322.8	326.9	332.1	332.8
27.5°	908.7	862.6	702.7	439.7	304.0	294.3	296.7	298.6	298.1	300.1	300.5
30°	939.5	871.6	655.9	343.7	284.8	277.3	272.9	271.2	271.2	274.4	275.6
32.5°	980.7	884.9	588.7	294.5	275.6	265.2	251.1	244.8	247.2	257.9	260.3
35°	1026.1	899.2	497.9	277.8	273.7	259.6	237.8	226.1	226.4	236.3	239.5
37.5°	1075.4	917.4	398.2	274.6	278.0	259.9	230.7	214.7	208.2	208.2	209.5
40°	1138.7	936.1	322.4	276.8	287.2	262.7	227.1	205.8	187.4	187.9	188.8
42.5°	1221.1	952.1	281.7	281.4	298.4	266.6	226.8	193.9	177.9	188.8	198.7
45°	1312.8	960.1	263.7	285.6	307.4	269.0	223.0	192.0	179.1	211.6	230.5
47.5°	1418.2	955.5	253.8	287.0	309.6	269.0	218.6	196.6	187.6	245.0	267.1
50°	1533.8	942.2	244.1	284.1	308.8	268.5	222.7	201.2	190.7	250.8	266.1
52.5°	1669.8	931.0	233.9	277.8	303.7	265.9	227.6	199.3	180.8	228.1	238.7
55°	1824.9	934.2	222.5	268.8	295.7	260.8	225.9	191.5	170.4	200.9	207.5
57.5°	2023.2	971.7	208.9	257.4	284.8	252.3	219.9	187.9	167.3	182.3	186.2
60°	2244.5	1037.1	192.0	246.0	271.2	238.7	215.3	189.6	168.7	180.8	182.7
62.5°	2406.9	1075.2	177.5	229.3	252.8	223.7	209.5	191.7	172.6	185.9	185.5
65°	2451.0	1012.7	159.3	204.8	227.9	208.0	202.1	194.1	174.3	190.0	187.9
66°	2389.2	945.3	151.3	193.5	215.3	200.2	198.5	193.9	173.6	190.5	186.8
67.5°	2239.2	807.1	137.5	176.7	195.1	188.6	192.7	191.7	171.6	190.0	184.9
70°	1826.1	550.7	117.6	147.1	162.4	166.0	181.6	184.0	165.3	181.6	170.4
72.5°	1275.9	335.5	104.0	114.2	131.4	141.6	166.3	173.3	156.8	158.5	147.9
75°	616.6	178.2	94.3	88.5	102.0	118.3	147.9	158.7	143.5	132.6	128.7
77.5°	192.2	108.8	80.0	71.3	80.0	95.5	123.6	139.1	127.8	111.0	109.6
80°	103.3	80.0	61.6	57.2	63.3	74.9	97.2	116.1	109.8	99.6	88.9
82.5°	68.1	51.9	45.6	44.3	48.2	57.2	72.2	96.2	96.2	85.4	62.1
85°	35.2	31.8	31.3	31.3	33.7	38.1	49.2	74.2	79.0	45.1	37.4
87.5°	17.5	18.2	17.0	17.7	18.9	18.6	23.5	37.4	44.6	27.4	22.8
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)