

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: P301080

Luminaire Tested: **GLNA-AF-01-LED-E1-T3R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301080
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-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
Roadway OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5517 lumens
Efficiency: N/A
Efficacy: 93.5 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

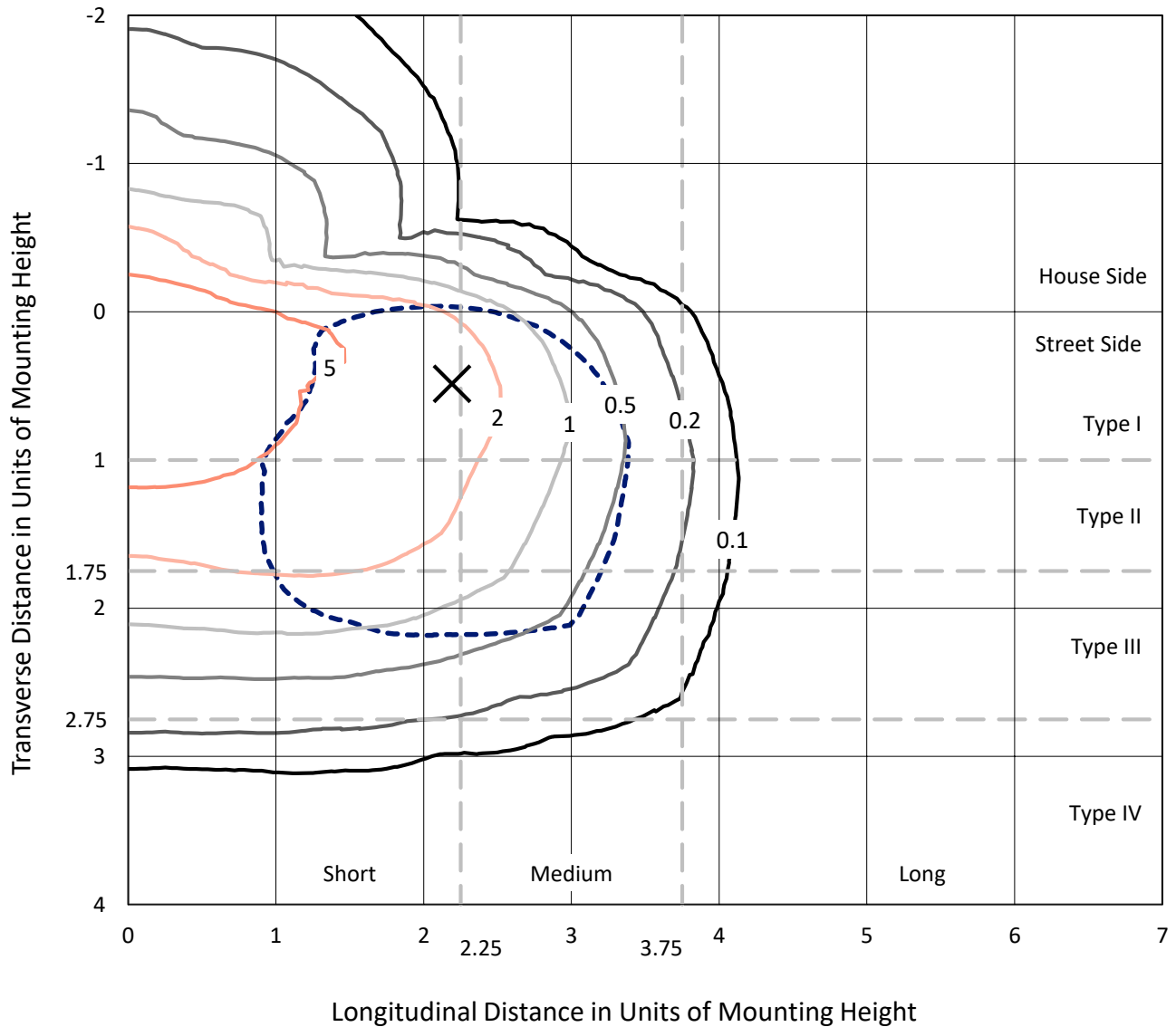
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

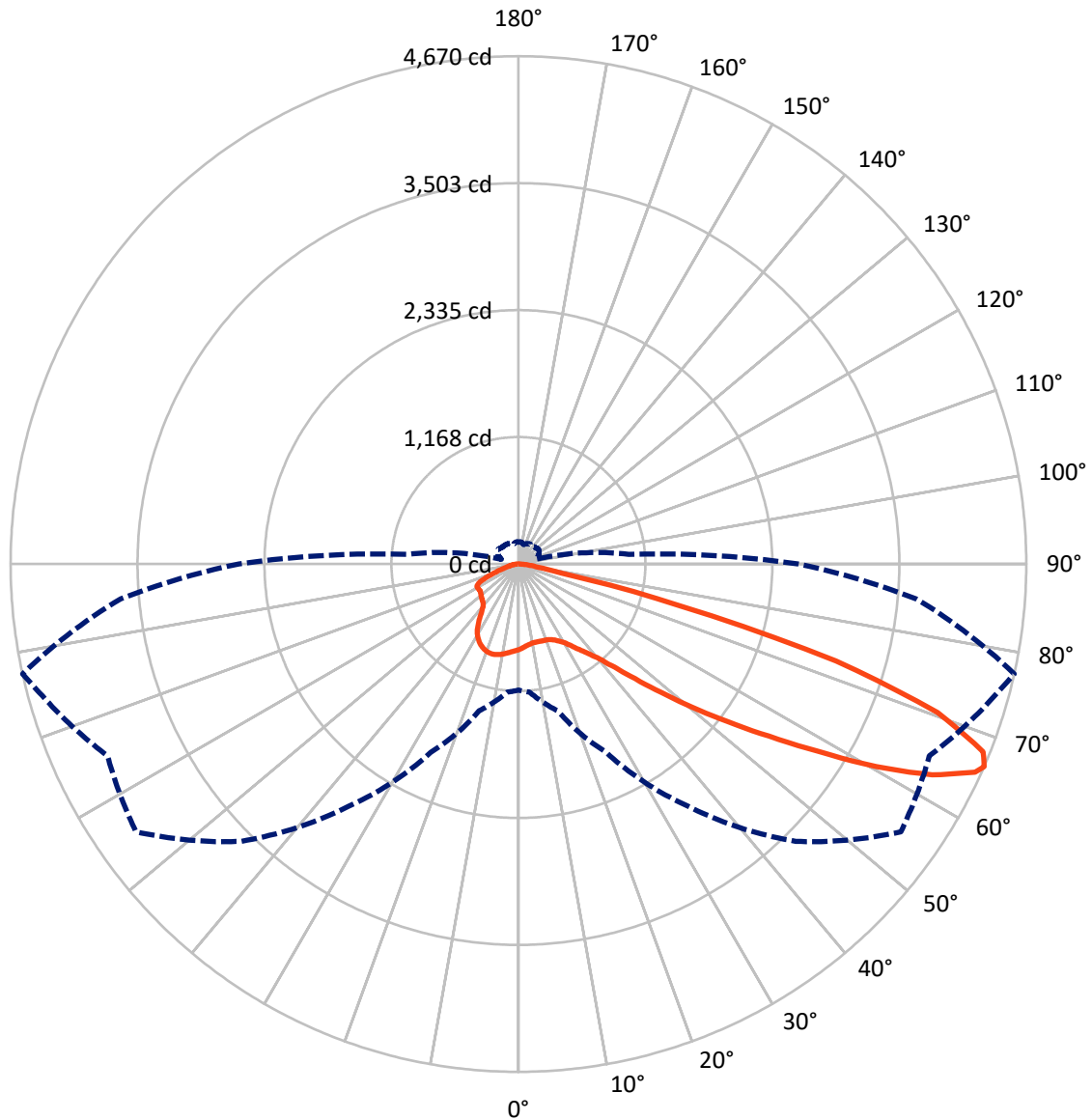
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.7 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	942.5	0.0	942.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	4574.4	0.0	4574.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	5517.0	0.0	5517.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	1.3
10°-20°	198.2	3.6
20°-30°	338.2	6.1
30°-40°	541.4	9.8
40°-50°	836.4	15.2
50°-60°	1186.3	21.5
60°-70°	1586.9	28.8
70°-80°	689.2	12.5
80°-90°	70.3	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°	5517.0	100.0
0°-180°	5517.0	100.0



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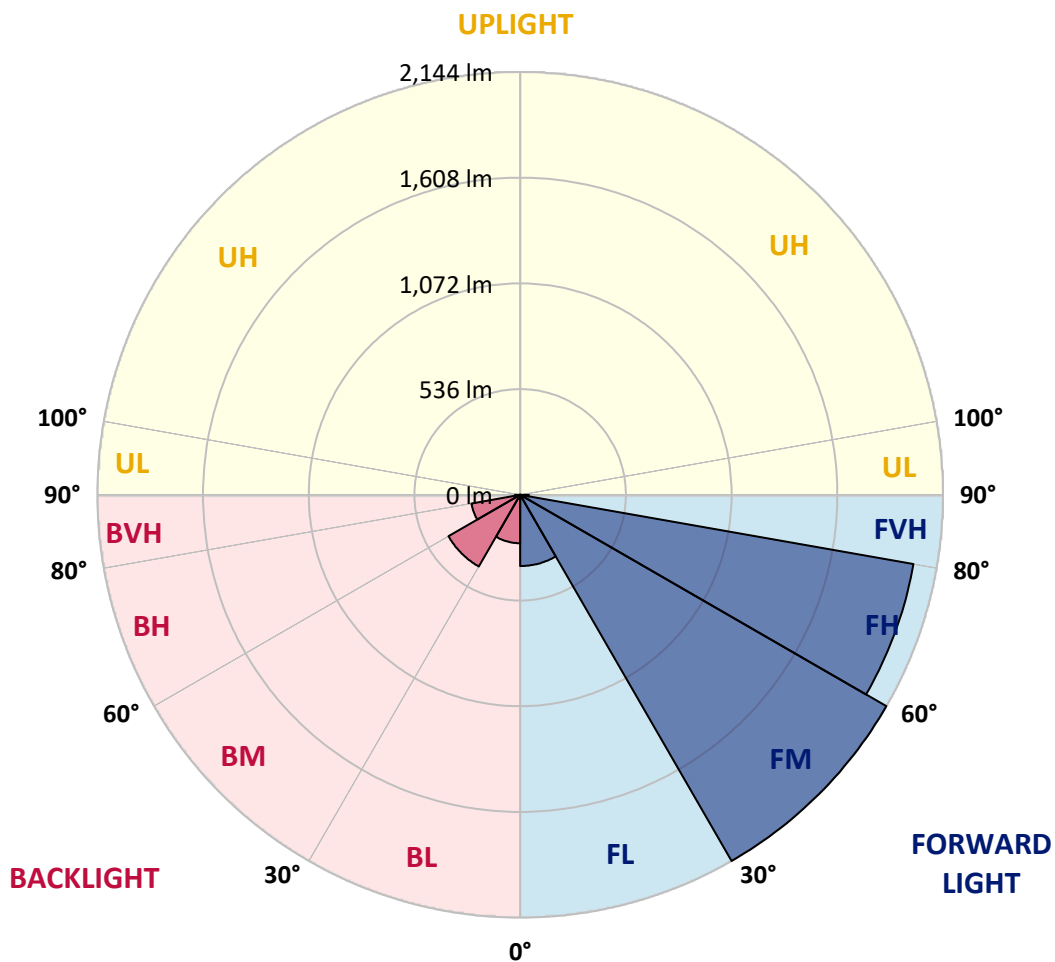
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	361.1	6.5			
FM	(30°-60°)	2144.2	38.9			
FH	(60°-80°)	2025.1	36.7			G2/5000
FVH	(80°-90°)	44.1	0.8			G1/100
BL	(0°-30°)	245.5	4.4	B1/500		
BM	(30°-60°)	419.8	7.6	B1/1000		
BH	(60°-80°)	251.0	4.5	B1/500		G1/500
BVH	(80°-90°)	26.2	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°	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2
2.5°	695.5	700.2	704.1	707.7	715.0	727.0	740.8	752.0	768.2	771.4	780.0
5°	631.7	631.7	634.7	640.3	650.1	668.1	686.9	711.9	747.1	755.4	778.4
7.5°	600.6	600.9	602.7	607.3	615.9	632.4	653.0	682.5	730.2	744.0	783.0
10°	612.1	609.5	605.5	603.2	604.5	614.1	633.7	666.5	719.7	737.4	793.5
12.5°	676.2	671.3	657.7	639.7	622.5	615.5	626.9	659.0	715.3	735.9	807.3
15°	781.0	778.9	753.6	716.3	674.7	639.7	631.9	656.1	715.8	737.7	823.8
17.5°	912.4	909.5	876.2	821.9	753.9	685.9	649.3	658.5	717.6	740.8	839.6
20°	1045.1	1036.2	1000.2	935.6	848.2	748.6	678.3	664.5	720.0	744.2	856.4
22.5°	1144.1	1136.8	1104.5	1041.7	941.0	821.4	717.1	674.9	727.5	754.1	876.9
25°	1231.2	1231.7	1199.6	1138.9	1034.9	898.6	767.2	702.8	746.8	774.4	905.1
27.5°	1338.8	1332.6	1302.6	1242.4	1127.7	976.5	827.6	741.1	775.5	803.4	942.1
30°	1467.6	1463.1	1428.5	1360.2	1230.6	1060.1	896.7	785.6	812.6	841.4	990.5
32.5°	1619.0	1617.0	1581.0	1493.1	1349.5	1158.7	977.8	844.6	867.8	897.8	1060.1
35°	1796.8	1797.1	1754.6	1649.0	1479.6	1273.4	1069.8	920.4	935.0	966.3	1143.1
37.5°	1906.3	1919.6	1903.7	1796.1	1626.8	1401.7	1189.2	1021.1	1011.7	1043.3	1232.0
40°	1929.8	1945.9	1996.2	1941.5	1791.6	1542.9	1295.0	1117.8	1106.1	1144.6	1346.4
42.5°	1896.9	1919.3	2025.7	2064.3	1966.5	1717.1	1437.3	1261.4	1246.6	1298.4	1488.7
45°	1877.4	1894.1	2017.1	2128.2	2118.2	1913.9	1618.6	1441.8	1436.3	1504.3	1653.0
47.5°	1843.5	1858.6	1977.0	2143.0	2207.4	2094.2	1836.2	1662.4	1673.0	1762.2	1838.3
50°	1861.7	1868.0	1932.1	2105.2	2233.2	2226.4	2079.4	1917.8	1954.3	2065.6	2048.2
52.5°	1859.1	1875.3	1926.9	2043.2	2236.6	2308.1	2319.0	2202.7	2279.6	2407.3	2280.9
55°	1503.1	1532.8	1865.7	2027.6	2248.5	2388.0	2532.2	2503.0	2646.3	2795.2	2543.7
57.5°	1435.3	1454.1	1638.6	2060.4	2312.2	2540.8	2769.4	2833.6	3073.3	3246.2	2863.8
60°	1421.9	1445.2	1636.2	2100.6	2441.2	2789.8	3121.1	3233.7	3592.9	3782.2	3235.0
62.5°	1380.5	1405.5	1620.8	2095.3	2624.5	3134.1	3571.3	3659.1	4085.6	4269.6	3545.5
65°	1249.2	1272.6	1495.5	2011.1	2748.1	3501.7	4104.0	4049.1	4474.5	4612.9	3700.3
66°	1159.2	1182.2	1396.7	1912.1	2719.3	3605.9	4292.8	4169.8	4561.6	4670.0	3670.0
67.5°	994.7	1012.7	1204.8	1690.2	2566.9	3635.1	4451.6	4260.5	4570.7	4609.0	3497.3
70°	628.5	633.7	783.0	1166.8	1943.1	3152.6	4209.9	4035.3	4193.8	4090.0	2931.8
72.5°	272.7	270.9	375.9	593.5	1100.1	2115.4	3405.5	3329.6	3289.8	3053.1	2052.3
75°	151.7	153.8	195.3	275.5	447.0	1039.1	2227.7	2131.8	1799.9	1535.9	930.6
77.5°	121.7	124.6	161.9	195.5	200.7	362.4	1042.5	848.2	510.7	409.8	258.6
80°	96.2	101.4	141.3	152.2	135.3	149.3	336.8	269.3	202.1	185.3	134.0
82.5°	76.1	79.8	121.2	115.2	94.6	100.6	161.3	157.2	131.4	119.7	77.4
85°	54.8	61.5	99.6	86.8	62.0	67.8	107.1	102.7	75.3	61.5	34.2
87.5°	22.4	29.2	70.4	57.6	34.6	31.6	53.4	50.3	35.7	26.0	17.0
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°	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2
2.5°	785.4	791.6	799.8	804.7	807.3	809.2	812.0	811.8	812.6	812.8	813.8
5°	790.6	801.0	812.8	815.9	815.9	813.0	810.2	805.4	803.6	803.2	803.6
7.5°	804.2	815.6	825.8	822.2	814.4	802.8	788.0	775.0	768.0	765.6	765.1
10°	821.4	835.2	839.4	825.6	802.6	775.0	745.5	724.2	711.9	708.5	707.5
12.5°	842.2	855.3	849.6	820.4	777.8	733.3	692.6	658.5	632.9	624.9	624.3
15°	865.2	875.4	855.3	804.2	740.8	675.1	602.7	543.8	512.0	501.8	501.0
17.5°	886.6	891.8	851.9	776.0	686.3	580.0	483.8	438.4	427.5	430.2	430.6
20°	904.8	904.8	840.4	735.6	600.6	454.6	393.8	393.1	400.9	408.8	410.3
22.5°	924.9	912.9	820.4	678.5	479.1	372.0	363.1	370.4	379.2	387.8	389.2
25°	949.6	919.4	792.4	592.0	376.6	337.8	341.2	347.2	351.6	357.1	357.9
27.5°	977.3	927.7	755.7	472.9	326.9	316.5	319.1	321.2	320.6	322.7	323.2
30°	1010.3	937.4	705.4	369.6	306.3	298.2	293.5	291.7	291.7	295.1	296.4
32.5°	1054.7	951.7	633.2	316.7	296.4	285.2	270.1	263.3	265.9	277.3	280.0
35°	1103.5	967.1	535.4	298.7	294.3	279.2	255.7	243.2	243.5	254.1	257.5
37.5°	1156.6	986.7	428.3	295.3	299.0	279.5	248.1	230.9	223.9	223.9	225.3
40°	1224.6	1006.7	346.7	297.7	308.9	282.6	244.3	221.3	201.5	202.1	203.1
42.5°	1313.3	1023.9	302.9	302.6	320.9	286.7	244.0	208.5	191.3	203.1	213.7
45°	1411.8	1032.5	283.6	307.1	330.5	289.3	239.9	206.5	192.7	227.5	247.9
47.5°	1525.2	1027.5	272.9	308.6	332.9	289.3	235.1	211.4	201.7	263.5	287.3
50°	1649.6	1013.3	262.5	305.5	332.1	288.8	239.5	216.3	205.1	269.8	286.2
52.5°	1795.8	1001.3	251.5	298.7	326.6	286.0	244.8	214.3	194.5	245.3	256.7
55°	1962.6	1004.7	239.3	289.1	318.0	280.5	242.9	205.9	183.3	216.1	223.1
57.5°	2175.9	1045.1	224.7	276.9	306.3	271.4	236.5	202.1	179.9	196.1	200.2
60°	2413.8	1115.4	206.5	264.6	291.7	256.7	231.5	203.9	181.5	194.5	196.5
62.5°	2588.5	1156.4	190.8	246.6	271.9	240.6	225.3	206.2	185.6	199.9	199.4
65°	2635.9	1089.1	171.3	220.3	245.1	223.7	217.4	208.8	187.5	204.3	202.1
66°	2569.5	1016.7	162.7	208.1	231.5	215.3	213.5	208.5	186.7	204.9	200.9
67.5°	2408.1	868.0	147.8	190.1	209.9	202.8	207.3	206.2	184.5	204.3	198.9
70°	1963.9	592.3	126.4	158.2	174.7	178.5	195.3	197.9	177.7	195.3	183.3
72.5°	1372.2	360.8	111.8	122.8	141.3	152.2	178.8	186.3	168.7	170.5	159.0
75°	663.1	191.6	101.4	95.2	109.7	127.2	159.0	170.7	154.3	142.6	138.4
77.5°	206.7	117.0	86.0	76.6	86.0	102.7	132.9	149.6	137.4	119.4	117.8
80°	111.1	86.0	66.2	61.5	68.0	80.6	104.5	124.9	118.1	107.1	95.7
82.5°	73.2	55.8	49.0	47.7	51.9	61.5	77.7	103.5	103.5	91.8	66.8
85°	37.8	34.2	33.6	33.6	36.2	41.0	52.9	79.8	85.0	48.5	40.2
87.5°	18.8	19.6	18.2	19.0	20.4	20.0	25.3	40.2	48.0	29.4	24.5
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)