

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: P298928

Luminaire Tested: **GLNA-AF-03-LED-E1-T2-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298928  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-T2-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13887.6 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 124  
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

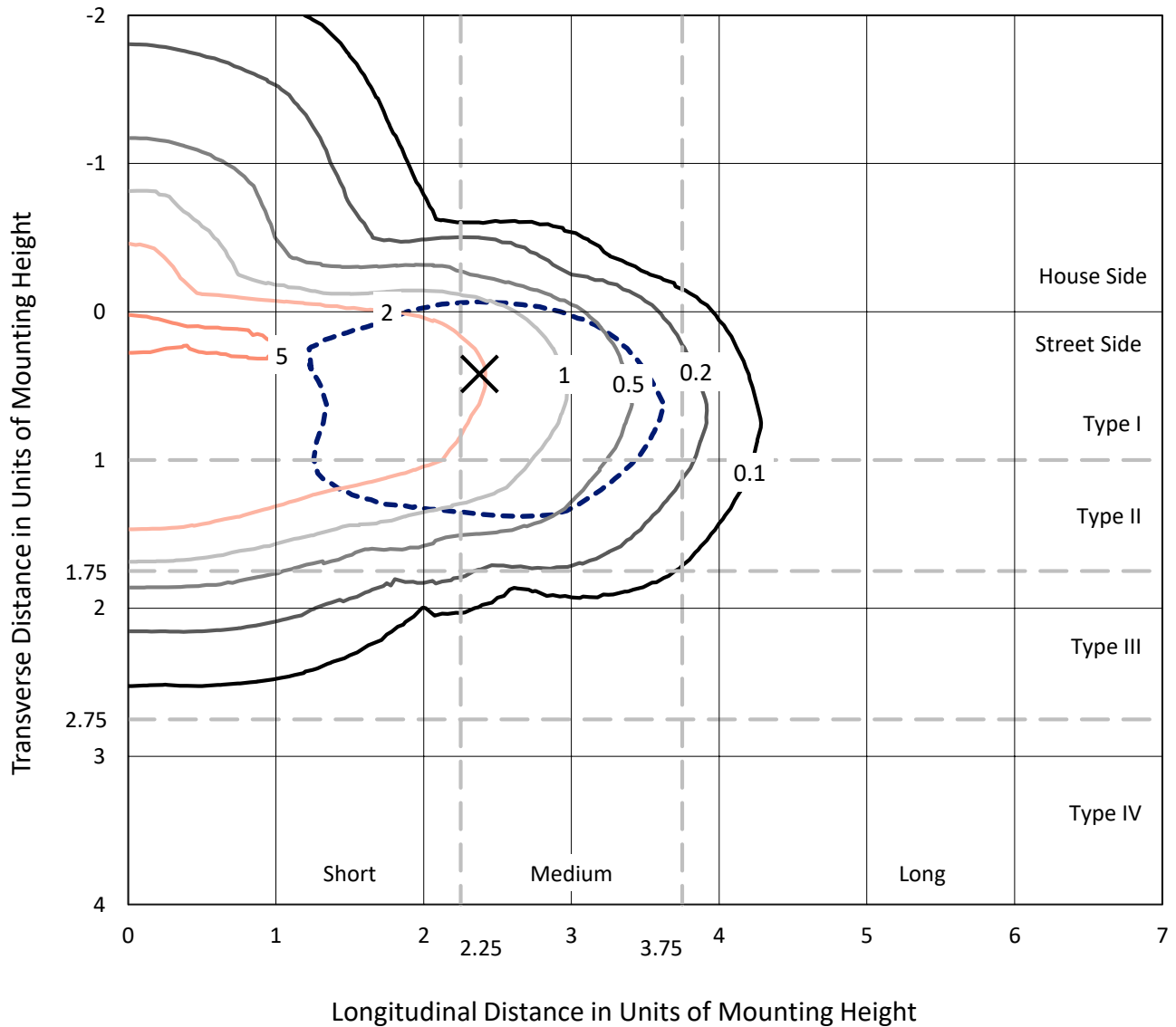


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

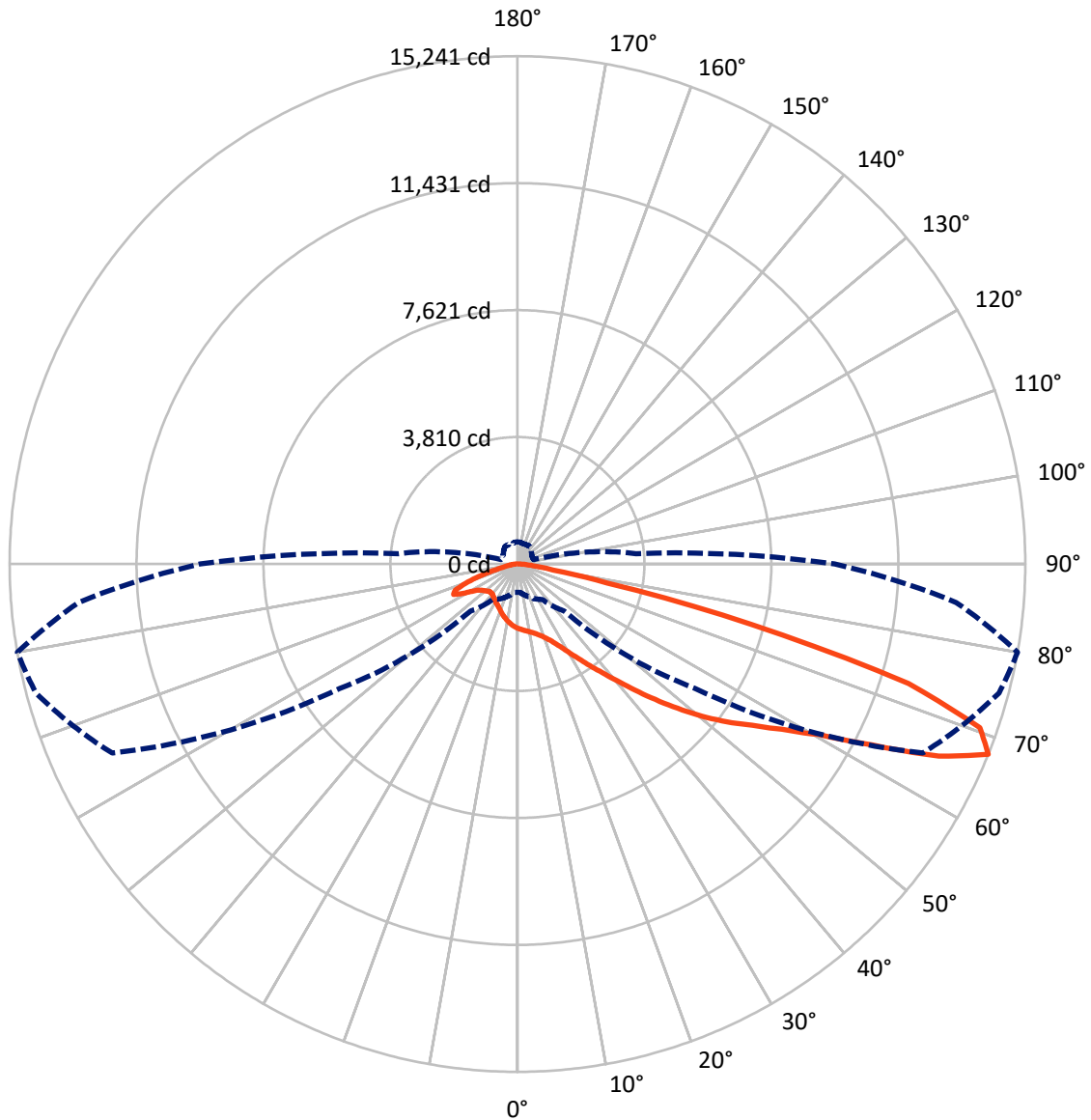


Based on 20 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2557.6	0.0	2557.6
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	11330.1	0.0	11330.1
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	13887.6	0.0	13887.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.0	1.3
10°-20°	512.7	3.7
20°-30°	848.6	6.1
30°-40°	1388.1	10.0
40°-50°	2241.3	16.1
50°-60°	3235.8	23.3
60°-70°	3570.9	25.7
70°-80°	1646.0	11.9
80°-90°	266.2	1.9
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°	13887.6	100.0
0°-180°	13887.6	100.0



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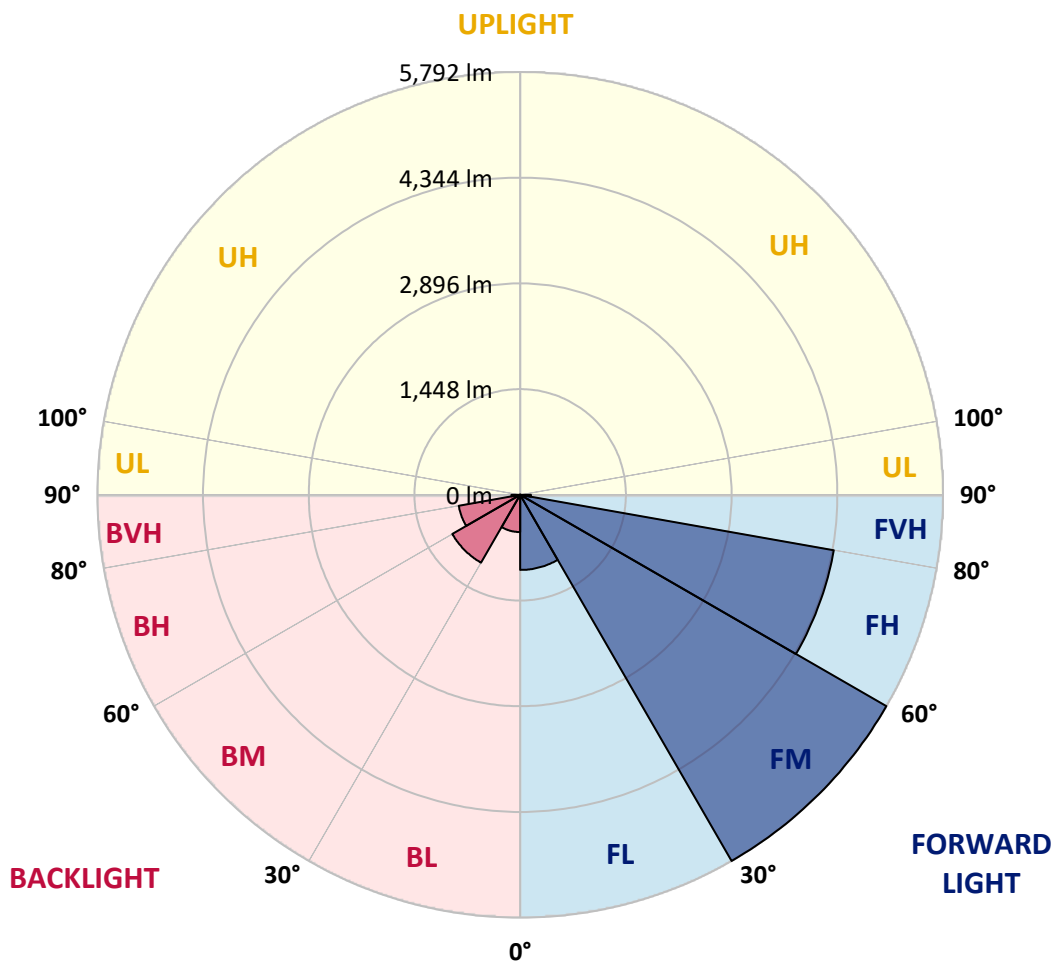
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1029.0	7.4			
FM (30°-60°)	5792.2	41.7			
FH (60°-80°)	4362.5	31.4			G2/5000
FVH (80°-90°)	146.4	1.1			G2/225
BL (0°-30°)	510.3	3.7	B2/1000		
BM (30°-60°)	1073.1	7.7	B2/2500		
BH (60°-80°)	854.4	6.2	B2/1000		G2/1000
BVH (80°-90°)	119.9	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4
2.5°	2110.6	2098.3	2100.3	2096.9	2086.6	2068.9	2049.7	2014.9	1978.6	1959.5	1944.4
5°	2287.0	2283.6	2278.8	2267.8	2241.8	2204.9	2159.1	2097.6	2031.3	1996.4	1962.9
7.5°	2418.9	2416.9	2410.7	2403.9	2378.6	2334.1	2265.1	2177.6	2081.2	2033.3	1981.4
10°	2429.9	2433.3	2438.1	2456.5	2459.9	2436.0	2365.6	2259.6	2133.1	2071.6	2005.3
12.5°	2336.9	2344.4	2362.9	2410.0	2459.9	2489.3	2453.1	2345.8	2194.0	2119.5	2035.4
15°	2213.8	2217.9	2240.5	2305.4	2395.0	2485.9	2520.1	2440.8	2272.6	2181.0	2080.5
17.5°	2161.2	2163.2	2178.9	2222.0	2305.4	2435.3	2557.7	2544.0	2369.0	2257.6	2135.9
20°	2134.5	2139.3	2161.9	2204.2	2256.9	2370.4	2563.2	2655.5	2483.9	2353.3	2205.6
22.5°	2210.4	2208.3	2216.5	2237.7	2282.2	2350.6	2559.1	2770.3	2630.2	2476.4	2296.5
25°	2387.5	2395.0	2380.6	2356.7	2371.1	2418.9	2581.0	2894.8	2813.4	2634.3	2415.5
27.5°	2639.8	2632.2	2611.0	2555.0	2525.6	2546.1	2653.4	3028.8	3041.1	2842.1	2572.8
30°	2891.4	2885.2	2864.7	2796.3	2736.2	2719.1	2794.3	3182.6	3312.5	3091.7	2765.6
32.5°	3152.5	3145.7	3126.6	3058.2	2985.7	2946.1	2994.6	3360.4	3632.5	3389.8	2992.5
35°	3474.6	3461.6	3421.2	3326.2	3255.1	3224.3	3246.9	3583.9	4001.7	3742.6	3268.1
37.5°	3777.4	3797.3	3756.2	3625.0	3532.7	3521.7	3547.0	3856.7	4399.6	4137.1	3584.6
40°	4081.7	4085.1	4048.2	3940.8	3845.8	3828.0	3891.6	4187.6	4869.3	4608.8	3969.5
42.5°	4396.2	4403.0	4340.8	4241.7	4171.9	4175.3	4247.8	4575.3	5408.0	5164.7	4412.6
45°	4768.8	4779.0	4710.7	4580.8	4517.2	4645.0	4615.0	5010.1	5998.8	5796.4	4921.3
47.5°	5158.5	5174.2	5122.3	5000.6	4921.3	5097.0	4982.1	5492.1	6634.6	6473.9	5479.8
50°	5371.1	5393.7	5444.3	5435.4	5418.3	5388.9	5391.6	6009.0	7290.3	7179.5	6054.1
52.5°	5257.0	5256.3	5440.9	5665.1	5904.4	5922.2	5890.7	6553.9	7902.9	7869.4	6594.9
55°	4734.6	4770.2	5049.8	5483.9	6137.6	6545.7	6638.7	7178.1	8504.5	8543.5	7144.0
57.5°	3864.9	3894.3	4271.7	4876.8	5823.1	6916.3	7702.5	8085.4	9177.3	9359.1	7874.8
60°	2621.3	2656.8	3056.8	3783.6	4976.6	6709.8	8715.1	9704.4	9982.7	10396.3	8900.4
62.5°	1540.4	1572.5	1898.6	2386.8	3504.0	5750.6	9159.5	12007.8	11261.9	11961.3	10464.7
65°	1060.4	1082.3	1240.9	1485.7	2013.5	3873.1	8608.4	13598.1	13230.2	13900.3	12278.5
67.5°	853.3	850.5	976.3	1143.1	1296.3	1997.1	6509.5	13418.3	14961.4	15241.0	13220.0
70°	702.8	700.1	785.6	923.7	1035.8	1124.7	3545.7	11323.4	14608.6	14722.1	12353.1
72.5°	588.0	590.7	645.4	748.0	849.8	847.1	1558.1	7965.8	11492.3	12277.2	9847.3
75°	496.4	497.7	534.0	606.4	689.9	682.3	845.1	4315.5	6680.4	7226.7	5458.6
77.5°	422.5	423.9	447.1	487.5	547.0	544.2	616.7	1864.4	2786.8	2752.6	1867.2
80°	376.7	376.7	387.7	395.2	428.0	415.7	457.4	895.6	1178.0	1087.8	745.2
82.5°	295.4	296.7	363.7	361.0	337.1	321.3	321.3	527.8	624.2	577.0	436.2
85°	166.1	165.5	234.5	283.1	296.7	226.3	224.3	295.4	339.8	299.5	211.3
87.5°	71.1	72.5	108.7	125.8	168.2	140.8	138.8	152.5	173.0	149.7	97.8
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°	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4	1929.4
2.5°	1930.1	1912.3	1873.3	1824.8	1781.0	1752.3	1726.3	1688.7	1690.8	1664.8	1645.7
5°	1928.7	1891.8	1801.5	1694.2	1591.0	1516.4	1460.4	1409.8	1397.5	1373.5	1359.2
7.5°	1930.1	1869.9	1718.1	1546.5	1418.7	1324.3	1276.5	1249.8	1243.6	1235.4	1236.1
10°	1934.9	1850.1	1626.5	1408.4	1274.4	1212.2	1200.6	1208.8	1218.3	1221.1	1221.8
12.5°	1945.8	1832.3	1526.0	1285.4	1184.2	1165.0	1184.8	1212.9	1231.3	1240.2	1239.5
15°	1970.4	1818.6	1429.6	1189.0	1134.3	1144.5	1181.4	1221.1	1247.7	1260.1	1260.7
17.5°	1997.1	1798.8	1330.5	1115.1	1097.3	1123.3	1169.1	1215.6	1248.4	1262.1	1264.8
20°	2031.9	1774.2	1226.6	1059.7	1062.5	1091.9	1134.9	1181.4	1217.7	1229.3	1234.8
22.5°	2077.8	1747.5	1135.6	1014.6	1022.8	1045.4	1078.9	1119.2	1150.7	1156.1	1160.9
25°	2139.3	1718.8	1063.2	973.6	977.0	990.0	1012.6	1036.5	1058.4	1052.2	1057.0
27.5°	2222.0	1694.2	1009.1	936.0	929.8	932.6	944.2	951.7	963.3	946.2	948.3
30°	2319.1	1667.5	967.4	903.2	886.1	881.3	884.0	888.1	897.0	873.8	870.3
32.5°	2431.9	1635.4	928.5	874.4	850.5	840.9	842.3	853.3	887.4	873.1	865.6
35°	2563.2	1599.2	887.4	843.0	826.6	812.9	811.5	845.7	947.6	938.7	931.9
37.5°	2717.0	1562.9	846.4	807.4	808.8	793.8	789.0	828.0	959.2	924.4	919.6
40°	2912.6	1543.8	811.5	769.8	786.9	784.9	775.3	795.1	882.7	819.1	810.9
42.5°	3154.6	1546.5	785.6	729.5	761.0	782.8	767.8	768.5	799.9	752.1	744.5
45°	3453.4	1578.7	767.1	697.4	731.6	780.8	765.1	754.1	756.9	731.6	727.5
47.5°	3802.0	1645.0	754.1	670.7	703.5	773.3	764.4	750.0	743.9	730.2	726.8
50°	4189.7	1741.4	744.5	645.4	678.2	761.0	765.1	745.9	739.1	733.6	731.6
52.5°	4570.5	1851.5	730.2	623.5	658.4	745.9	767.1	741.8	734.3	730.2	728.1
55°	4995.1	1988.9	708.3	605.1	642.0	726.8	767.1	735.7	727.5	728.1	727.5
57.5°	5568.7	2211.1	682.3	589.3	622.2	703.5	754.1	728.8	718.6	719.3	719.9
60°	6465.0	2602.8	650.9	573.6	597.6	676.2	736.3	713.8	703.5	706.3	706.9
62.5°	7783.2	3177.8	609.9	550.4	571.6	646.8	711.7	694.6	684.4	691.2	691.2
65°	9153.3	3685.1	559.3	521.0	544.2	614.6	681.0	670.7	660.5	676.2	675.5
67.5°	9521.9	3571.6	508.7	488.8	516.9	579.1	644.0	638.6	633.1	660.5	659.1
70°	8458.7	2867.4	462.2	456.0	486.8	540.8	604.4	604.4	601.0	621.5	616.7
72.5°	6444.5	2033.3	417.7	421.2	452.6	499.1	561.3	566.1	560.6	570.9	566.8
75°	3449.9	1163.7	373.3	382.9	410.2	456.7	513.5	518.2	514.8	514.1	516.2
77.5°	1146.6	568.8	326.8	341.8	365.8	413.0	463.5	471.1	462.9	461.5	460.8
80°	510.7	357.6	275.5	295.4	316.6	363.0	410.9	417.1	408.2	420.5	404.7
82.5°	328.2	235.2	220.8	242.7	263.2	313.1	358.3	359.6	351.4	408.2	348.0
85°	159.3	145.6	166.1	186.0	203.7	246.1	296.7	297.4	276.9	252.3	243.4
87.5°	79.3	84.8	110.8	128.5	137.4	168.9	216.0	211.9	203.1	184.6	170.2
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)