

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: P298880

Luminaire Tested: **GLNA-AF-05-LED-E1-T2-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P298880  
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-05-LED-E1-T2-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28142.6 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G4

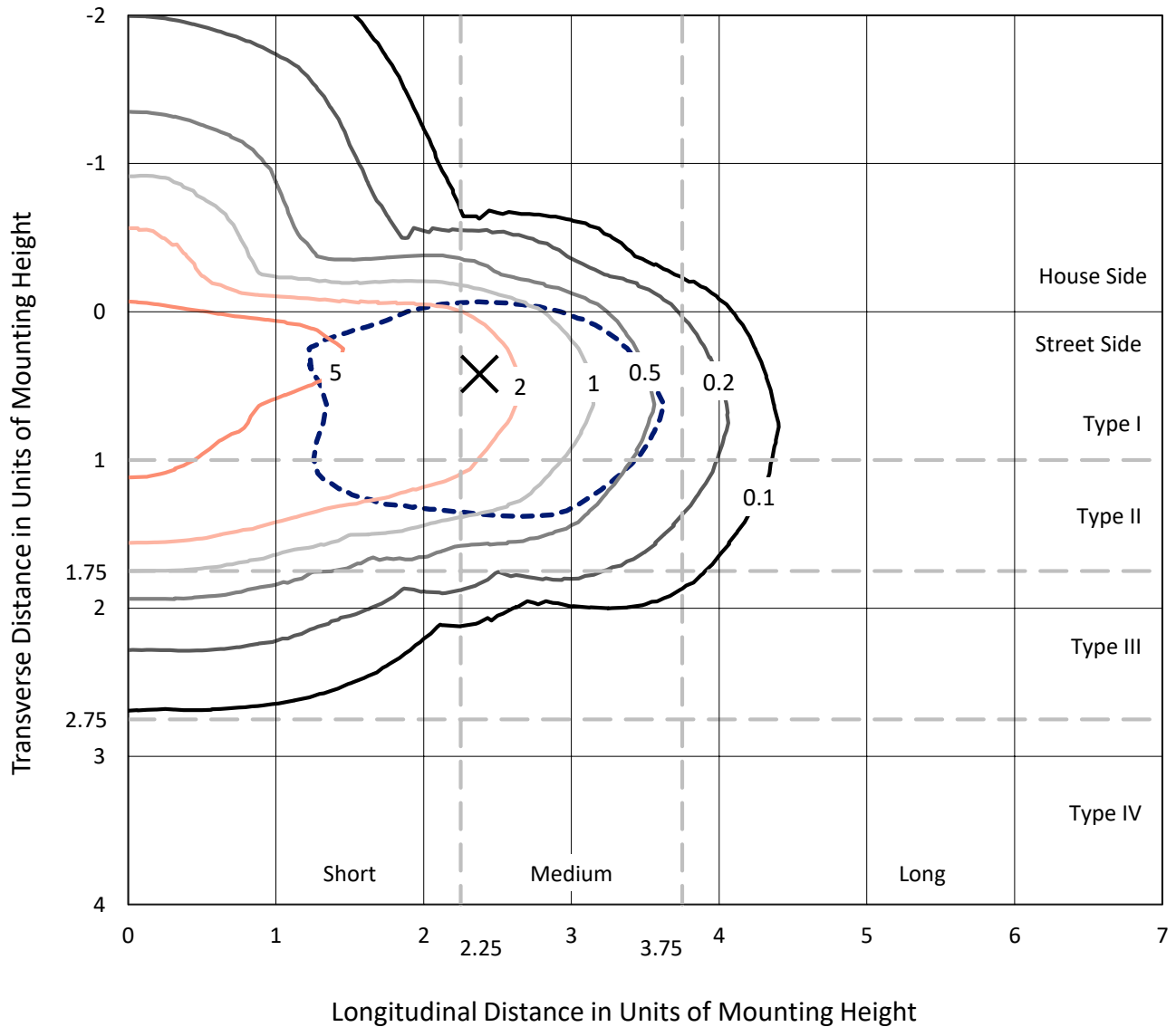
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

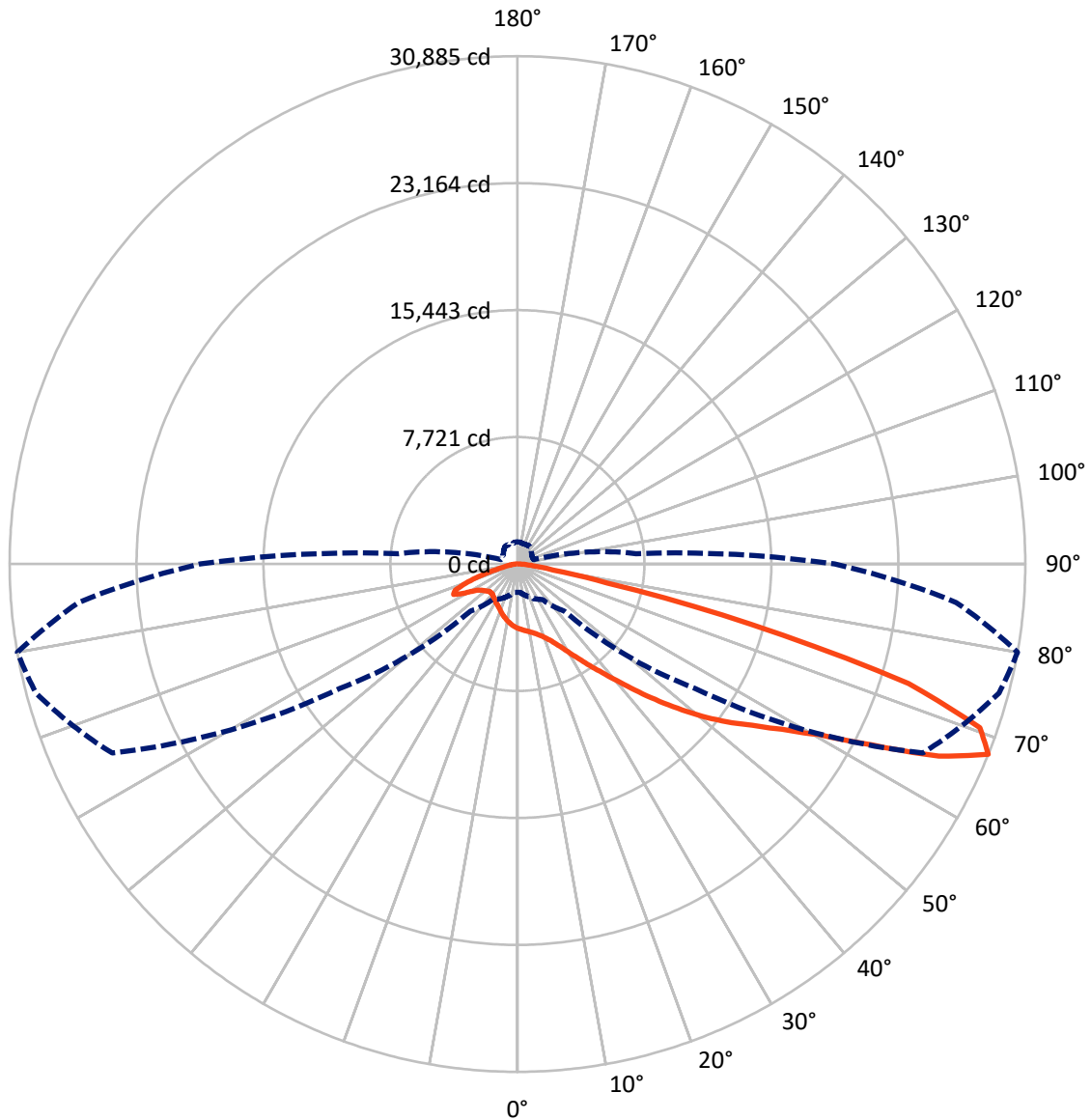
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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	5182.8	0.0	5182.8
	% Fixture	18.4	0.0	18.4
<b>Street Side</b>	Lumens	22959.8	0.0	22959.8
	% Fixture	81.6	0.0	81.6
<b>Total</b>	Lumens	28142.6	0.0	28142.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.7	1.3
10°-20°	1039.0	3.7
20°-30°	1719.7	6.1
30°-40°	2813.0	10.0
40°-50°	4541.9	16.1
50°-60°	6557.2	23.3
60°-70°	7236.2	25.7
70°-80°	3335.5	11.9
80°-90°	539.5	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°	28142.6	100.0
0°-180°	28142.6	100.0



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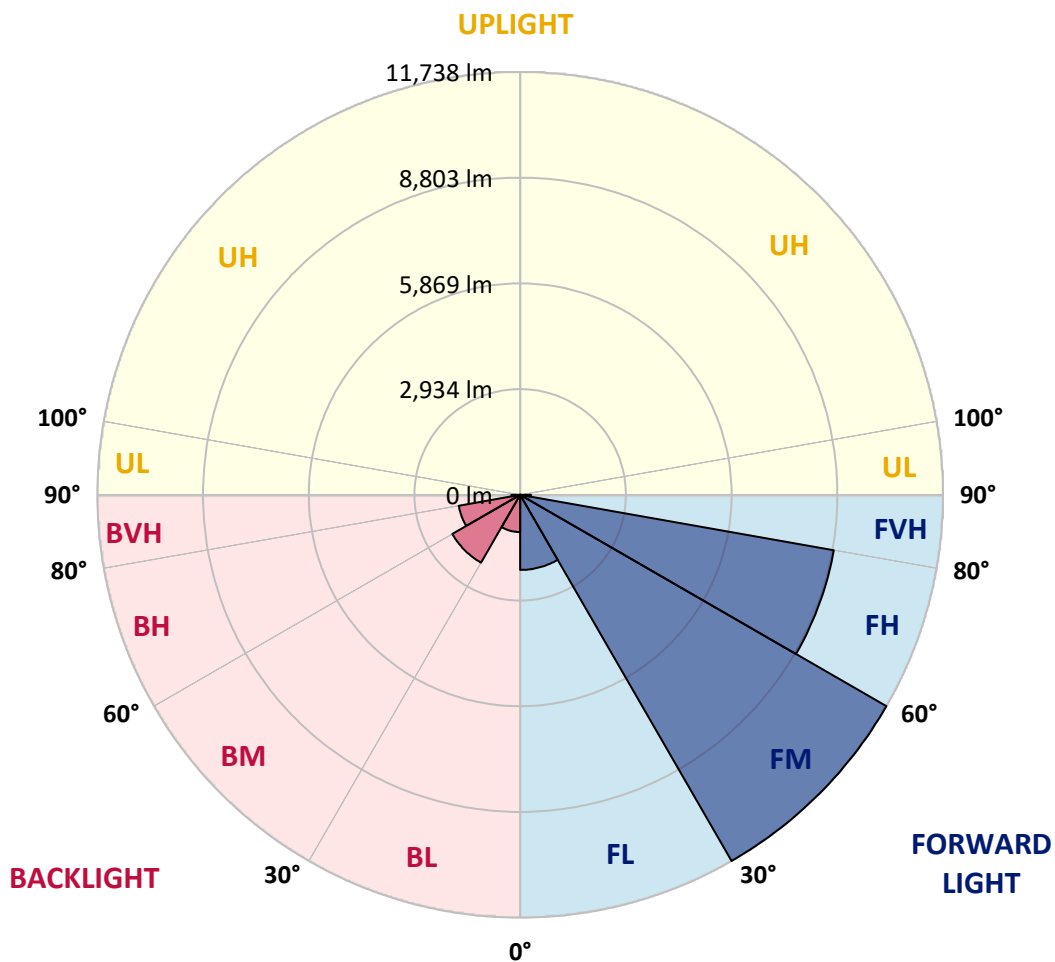
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2085.3	7.4			
FM (30°-60°)	11737.6	41.7			
FH (60°-80°)	8840.3	31.4			G4/12000
FVH (80°-90°)	296.6	1.1			G3/500
BL (0°-30°)	1034.0	3.7	B3/2500		
BM (30°-60°)	2174.5	7.7	B2/2500		
BH (60°-80°)	1731.4	6.2	B3/2500		G3/2500
BVH (80°-90°)	242.9	0.9			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8
2.5°	4277.0	4252.0	4256.2	4249.3	4228.5	4192.5	4153.7	4083.0	4009.6	3970.8	3940.3
5°	4634.4	4627.5	4617.8	4595.6	4543.0	4468.2	4375.4	4250.7	4116.3	4045.6	3977.7
7.5°	4901.8	4897.7	4885.2	4871.4	4820.1	4730.0	4590.1	4412.8	4217.4	4120.4	4015.1
10°	4924.0	4930.9	4940.6	4978.0	4985.0	4936.5	4793.8	4579.0	4322.7	4198.0	4063.6
12.5°	4735.6	4750.8	4788.2	4883.8	4985.0	5044.5	4971.1	4753.6	4446.0	4295.0	4124.6
15°	4486.2	4494.5	4540.2	4671.8	4853.3	5037.6	5106.9	4946.2	4605.3	4419.7	4216.0
17.5°	4379.5	4383.7	4415.5	4502.8	4671.8	4935.1	5183.1	5155.4	4800.7	4574.9	4328.2
20°	4325.5	4335.2	4380.9	4466.8	4573.5	4803.5	5194.2	5381.2	5033.5	4768.8	4469.6
22.5°	4479.3	4475.1	4491.7	4534.7	4624.7	4763.3	5185.9	5614.0	5329.9	5018.2	4653.8
25°	4838.1	4853.3	4824.2	4775.8	4804.9	4901.8	5230.2	5866.1	5701.3	5338.3	4894.9
27.5°	5349.3	5334.1	5291.2	5177.5	5118.0	5159.5	5377.1	6137.7	6162.6	5759.4	5213.6
30°	5859.2	5846.7	5805.2	5666.6	5544.7	5510.1	5662.5	6449.4	6712.7	6265.1	5604.3
32.5°	6388.5	6374.6	6335.8	6197.3	6050.4	5970.0	6068.4	6809.6	7361.1	6869.2	6064.3
35°	7041.0	7014.7	6933.0	6740.4	6596.3	6533.9	6579.7	7262.7	8109.2	7584.1	6622.6
37.5°	7654.8	7695.0	7611.8	7345.8	7158.8	7136.6	7187.9	7815.5	8915.6	8383.6	7264.1
40°	8271.3	8278.3	8203.4	7985.9	7793.3	7757.3	7886.2	8486.1	9867.4	9339.5	8044.1
42.5°	8908.6	8922.5	8796.4	8595.5	8454.2	8461.1	8608.0	9271.6	10959.2	10465.9	8941.9
45°	9663.7	9684.5	9546.0	9282.7	9153.9	9413.0	9352.0	10152.8	12156.2	11746.1	9972.7
47.5°	10453.5	10485.3	10380.0	10133.4	9972.7	10328.8	10096.0	11129.6	13444.7	13119.1	11104.6
50°	10884.3	10930.1	11032.6	11014.6	10979.9	10920.4	10925.9	12177.0	14773.4	14548.9	12268.4
52.5°	10653.0	10651.6	11025.7	11480.1	11965.0	12001.0	11937.3	13281.2	16014.8	15946.9	13364.4
55°	9594.5	9666.5	10233.2	11113.0	12437.5	13264.6	13453.0	14546.2	17234.0	17313.0	14476.9
57.5°	7832.1	7891.7	8656.5	9882.6	11800.1	14015.5	15608.8	16384.7	18597.3	18965.9	15958.0
60°	5311.9	5384.0	6194.5	7667.3	10084.9	13597.1	17660.7	19665.5	20229.4	21067.6	18036.2
62.5°	3121.5	3186.6	3847.5	4836.7	7100.6	11653.3	18561.3	24333.2	22821.7	24239.0	21206.2
65°	2148.9	2193.2	2514.6	3010.7	4080.2	7848.8	17444.6	27555.9	26810.5	28168.2	24881.9
67.5°	1729.1	1723.5	1978.5	2316.5	2626.9	4047.0	13191.2	27191.5	30318.5	30885.2	26789.7
70°	1424.3	1418.7	1591.9	1871.8	2099.0	2279.1	7185.1	22946.4	29603.6	29833.6	25032.9
72.5°	1191.5	1197.1	1307.9	1515.7	1722.2	1716.6	3157.5	16142.3	23288.6	24879.1	19955.1
75°	1005.9	1008.6	1082.1	1228.9	1398.0	1382.7	1712.5	8745.2	13537.5	14644.5	11061.7
77.5°	856.2	859.0	906.1	987.8	1108.4	1102.8	1249.7	3778.2	5647.2	5578.0	3783.8
80°	763.4	763.4	785.6	800.8	867.3	842.4	926.9	1815.0	2387.2	2204.3	1510.2
82.5°	598.5	601.3	737.1	731.5	683.0	651.2	651.2	1069.6	1264.9	1169.3	883.9
85°	336.7	335.3	475.2	573.6	601.3	458.6	454.4	598.5	688.6	606.8	428.1
87.5°	144.1	146.9	220.3	254.9	340.8	285.4	281.3	309.0	350.5	303.4	198.1
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°	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8	3909.8
2.5°	3911.2	3875.2	3796.2	3697.9	3609.2	3551.0	3498.3	3422.1	3426.3	3373.6	3334.9
5°	3908.4	3833.6	3650.7	3433.2	3224.0	3073.0	2959.4	2856.9	2831.9	2783.4	2754.3
7.5°	3911.2	3789.3	3481.7	3134.0	2874.9	2683.7	2586.7	2532.7	2520.2	2503.6	2505.0
10°	3920.9	3749.1	3296.1	2854.1	2582.5	2456.5	2432.9	2449.5	2468.9	2474.5	2475.9
12.5°	3943.1	3713.1	3092.4	2604.7	2399.7	2360.9	2401.0	2457.8	2495.3	2513.3	2511.9
15°	3993.0	3685.4	2897.0	2409.4	2298.5	2319.3	2394.1	2474.5	2528.5	2553.4	2554.8
17.5°	4047.0	3645.2	2696.1	2259.7	2223.7	2276.3	2369.2	2463.4	2529.9	2557.6	2563.1
20°	4117.7	3595.3	2485.6	2147.5	2153.0	2212.6	2299.9	2394.1	2467.5	2491.1	2502.2
22.5°	4210.5	3541.3	2301.3	2056.1	2072.7	2118.4	2186.3	2268.0	2331.8	2342.8	2352.5
25°	4335.2	3483.1	2154.4	1972.9	1979.9	2006.2	2051.9	2100.4	2144.7	2132.3	2142.0
27.5°	4502.8	3433.2	2045.0	1896.7	1884.3	1889.8	1913.4	1928.6	1952.1	1917.5	1921.7
30°	4699.6	3379.2	1960.5	1830.2	1795.6	1785.9	1791.4	1799.7	1817.8	1770.6	1763.7
32.5°	4928.2	3314.1	1881.5	1772.0	1723.5	1704.1	1706.9	1729.1	1798.4	1769.3	1754.0
35°	5194.2	3240.6	1798.4	1708.3	1675.0	1647.3	1644.6	1713.8	1920.3	1902.3	1888.4
37.5°	5505.9	3167.2	1715.2	1636.3	1639.0	1608.5	1598.8	1677.8	1943.8	1873.2	1863.5
40°	5902.2	3128.4	1644.6	1560.1	1594.7	1590.5	1571.1	1611.3	1788.7	1659.8	1643.2
42.5°	6392.6	3134.0	1591.9	1478.3	1542.0	1586.4	1555.9	1557.3	1621.0	1524.0	1508.8
45°	6998.1	3199.1	1554.5	1413.2	1482.5	1582.2	1550.4	1528.2	1533.7	1482.5	1474.2
47.5°	7704.7	3333.5	1528.2	1359.2	1425.7	1567.0	1549.0	1519.9	1507.4	1479.7	1472.8
50°	8490.2	3528.8	1508.8	1307.9	1374.4	1542.0	1550.4	1511.6	1497.7	1486.6	1482.5
52.5°	9261.9	3751.9	1479.7	1263.6	1334.2	1511.6	1554.5	1503.2	1488.0	1479.7	1475.5
55°	10122.3	4030.4	1435.4	1226.2	1301.0	1472.8	1554.5	1490.8	1474.2	1475.5	1474.2
57.5°	11284.8	4480.6	1382.7	1194.3	1260.8	1425.7	1528.2	1476.9	1456.1	1457.5	1458.9
60°	13101.1	5274.5	1319.0	1162.4	1210.9	1370.2	1492.2	1446.4	1425.7	1431.2	1432.6
62.5°	15772.3	6439.7	1235.8	1115.3	1158.3	1310.7	1442.3	1407.6	1386.9	1400.7	1400.7
65°	18548.8	7467.7	1133.3	1055.7	1102.8	1245.5	1379.9	1359.2	1338.4	1370.2	1368.9
67.5°	19295.6	7237.8	1030.8	990.6	1047.4	1173.5	1305.1	1294.0	1283.0	1338.4	1335.6
70°	17141.2	5810.7	936.6	924.1	986.5	1095.9	1224.8	1224.8	1217.8	1259.4	1249.7
72.5°	13059.6	4120.4	846.5	853.5	917.2	1011.4	1137.5	1147.2	1136.1	1156.9	1148.6
75°	6991.1	2358.1	756.5	775.9	831.3	925.5	1040.5	1050.2	1043.3	1041.9	1046.0
77.5°	2323.5	1152.7	662.3	692.7	741.2	836.8	939.4	954.6	938.0	935.2	933.8
80°	1035.0	724.6	558.3	598.5	641.5	735.7	832.7	845.1	827.1	852.1	820.2
82.5°	665.0	476.6	447.5	491.8	533.4	634.6	726.0	728.8	712.1	827.1	705.2
85°	322.8	295.1	336.7	376.9	412.9	498.8	601.3	602.7	561.1	511.2	493.2
87.5°	160.7	171.8	224.4	260.5	278.5	342.2	437.8	429.5	411.5	374.1	345.0
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)