

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: P298951

Luminaire Tested: **GLNA-AF-07-LED-E1-T2-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298951
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-07-LED-E1-T2-7027-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28901.5 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 295
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

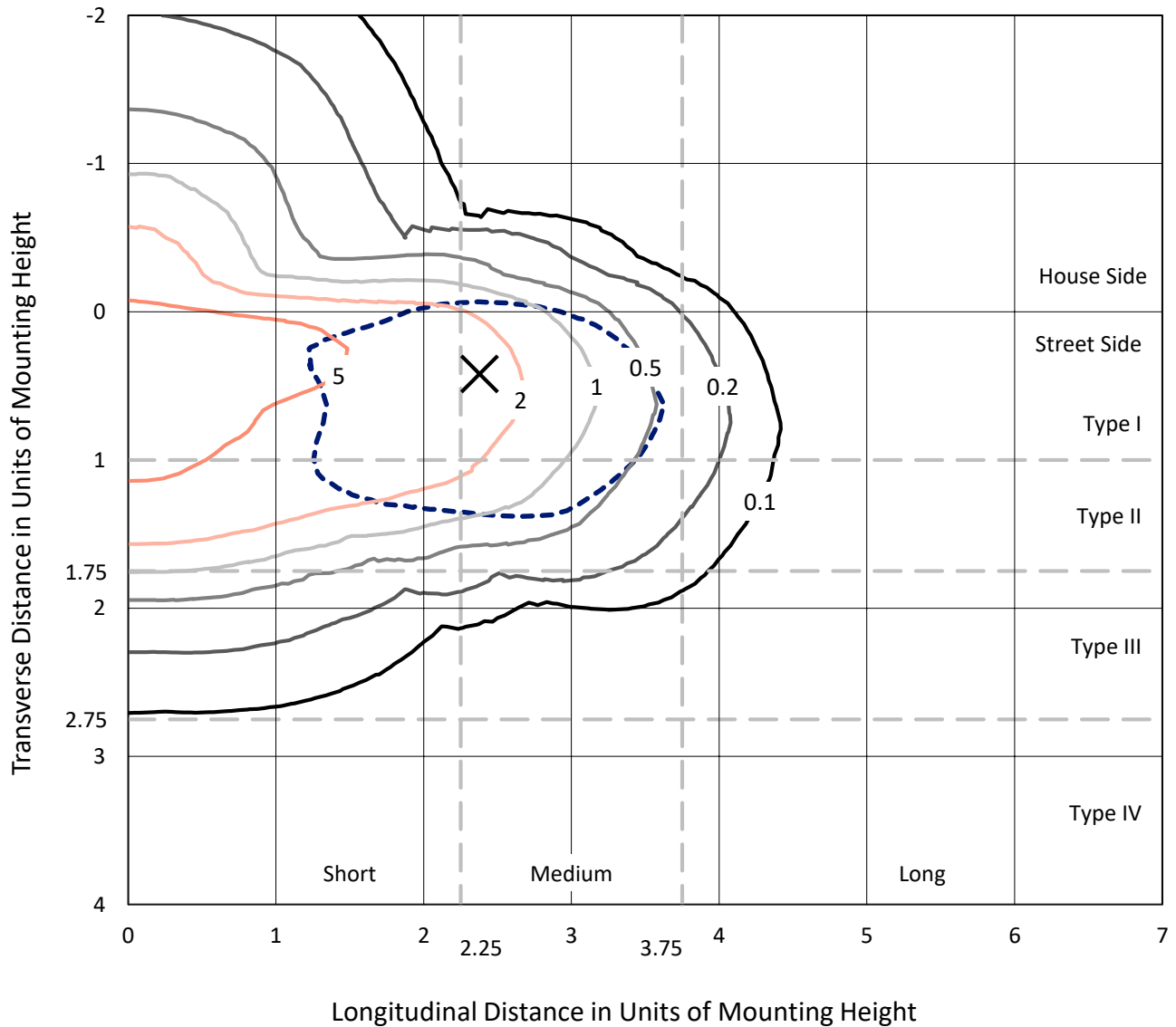


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

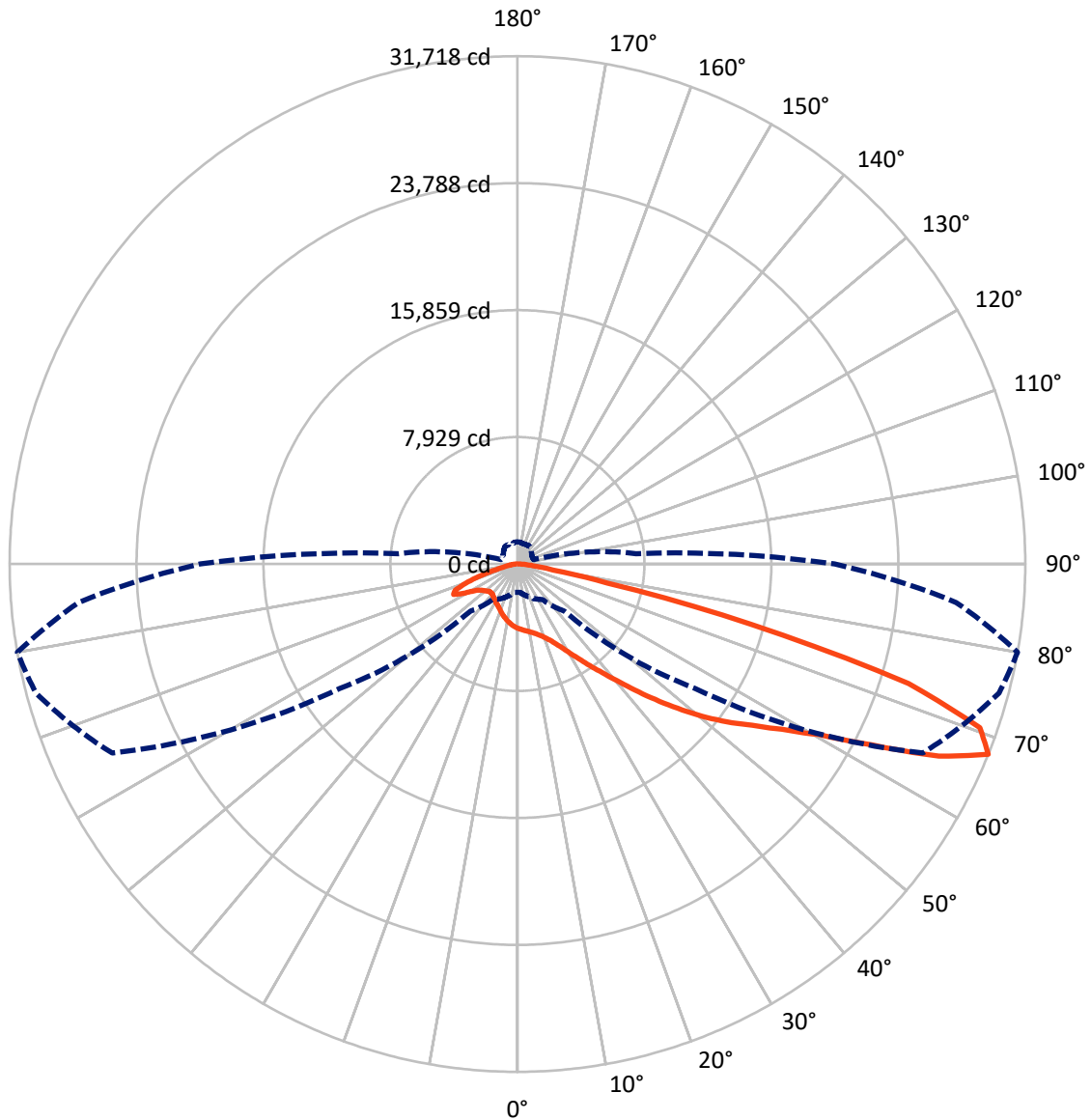


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Medium - Full Cutoff

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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
House Side	Lumens	5322.6	0.0	5322.6
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	23578.9	0.0	23578.9
	% Fixture	81.6	0.0	81.6
Total	Lumens	28901.5	0.0	28901.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.4	1.3
10°-20°	1067.0	3.7
20°-30°	1766.1	6.1
30°-40°	2888.9	10.0
40°-50°	4664.4	16.1
50°-60°	6734.0	23.3
60°-70°	7431.4	25.7
70°-80°	3425.4	11.9
80°-90°	554.0	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°	28901.5	100.0
0°-180°	28901.5	100.0



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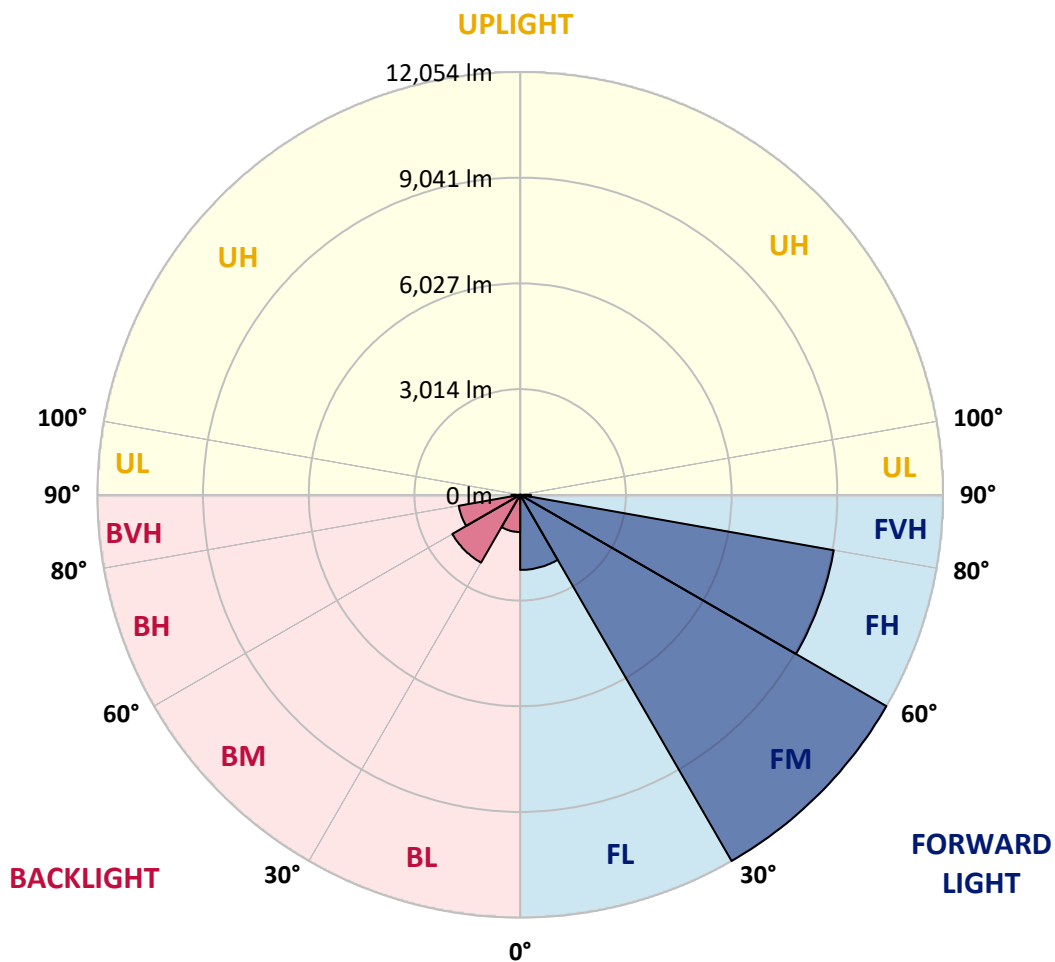
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2141.5	7.4			
FM (30°-60°)	12054.1	41.7			
FH (60°-80°)	9078.7	31.4			G4/12000
FVH (80°-90°)	304.6	1.1			G3/500
BL (0°-30°)	1061.9	3.7	B3/2500		
BM (30°-60°)	2233.1	7.7	B2/2500		
BH (60°-80°)	1778.1	6.2	B3/2500		G3/2500
BVH (80°-90°)	249.4	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°	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3
2.5°	4392.3	4366.7	4371.0	4363.8	4342.5	4305.5	4265.7	4193.1	4117.7	4077.9	4046.6
5°	4759.4	4752.3	4742.3	4719.6	4665.5	4588.7	4493.3	4365.3	4227.3	4154.7	4085.0
7.5°	5034.0	5029.7	5016.9	5002.7	4950.1	4857.6	4713.9	4531.7	4331.1	4231.5	4123.4
10°	5056.8	5063.9	5073.8	5112.3	5119.4	5069.6	4923.0	4702.5	4439.3	4311.2	4173.2
12.5°	4863.3	4878.9	4917.3	5015.5	5119.4	5180.6	5105.1	4881.8	4565.9	4410.8	4235.8
15°	4607.2	4615.7	4662.6	4797.8	4984.2	5173.4	5244.6	5079.5	4729.5	4538.9	4329.7
17.5°	4497.6	4501.9	4534.6	4624.2	4797.8	5068.2	5322.8	5294.4	4930.1	4698.2	4444.9
20°	4442.1	4452.1	4499.0	4587.2	4696.8	4933.0	5334.2	5526.3	5169.2	4897.4	4590.1
22.5°	4600.0	4595.8	4612.8	4657.0	4749.4	4891.7	5325.7	5765.3	5473.7	5153.5	4779.3
25°	4968.6	4984.2	4954.3	4904.5	4934.4	5034.0	5371.2	6024.3	5855.0	5482.2	5026.9
27.5°	5493.6	5477.9	5433.8	5317.2	5256.0	5298.7	5522.0	6303.2	6328.8	5914.7	5354.1
30°	6017.2	6004.4	5961.7	5819.4	5694.2	5658.6	5815.1	6623.3	6893.7	6434.1	5755.4
32.5°	6560.7	6546.5	6506.6	6364.4	6213.5	6131.0	6232.0	6993.3	7559.5	7054.4	6227.8
35°	7230.9	7203.8	7119.9	6922.1	6774.1	6710.1	6757.1	7458.5	8327.9	7788.6	6801.2
37.5°	7861.2	7902.4	7817.1	7543.9	7351.8	7329.0	7381.7	8026.2	9156.0	8609.6	7459.9
40°	8494.4	8501.5	8424.6	8201.2	8003.5	7966.5	8098.8	8714.9	10133.5	9591.4	8261.0
42.5°	9148.9	9163.1	9033.6	8827.3	8682.2	8689.3	8840.1	9521.6	11254.7	10748.1	9183.0
45°	9924.3	9945.6	9803.4	9533.0	9400.7	9666.8	9604.2	10426.6	12484.0	12062.8	10241.6
47.5°	10735.3	10768.0	10659.9	10406.6	10241.6	10607.3	10368.2	11429.7	13807.2	13472.9	11404.1
50°	11177.8	11224.8	11330.1	11311.6	11276.0	11214.8	11220.5	12505.3	15171.7	14941.2	12599.2
52.5°	10940.2	10938.8	11323.0	11789.6	12287.6	12324.6	12259.2	13639.3	16446.6	16376.9	13724.7
55°	9853.2	9927.1	10509.1	11412.6	12772.8	13622.3	13815.8	14938.4	17698.7	17779.8	14867.2
57.5°	8043.3	8104.5	8889.9	10149.1	12118.3	14393.4	16029.7	16826.5	19098.8	19477.2	16388.3
60°	5455.2	5529.2	6361.5	7874.0	10356.8	13963.7	18136.9	20195.8	20774.9	21635.7	18522.5
62.5°	3205.7	3272.5	3951.2	4967.1	7292.1	11967.5	19061.8	24989.3	23437.0	24892.6	21778.0
65°	2206.8	2252.4	2582.5	3091.8	4190.3	8060.4	17915.0	28298.9	27533.4	28927.7	25552.8
67.5°	1775.7	1770.0	2031.8	2379.0	2697.7	4156.1	13546.9	27924.6	31136.0	31717.9	27512.0
70°	1462.7	1457.0	1634.8	1922.3	2155.6	2340.6	7378.8	23565.1	30401.8	30638.0	25707.9
72.5°	1223.6	1229.3	1343.2	1556.6	1768.6	1762.9	3242.7	16577.5	23916.5	25549.9	20493.2
75°	1033.0	1035.8	1111.2	1262.1	1435.6	1420.0	1758.6	8981.0	13902.6	15039.4	11359.9
77.5°	879.3	882.2	930.5	1014.5	1138.3	1132.6	1283.4	3880.1	5799.5	5728.4	3885.8
80°	784.0	784.0	806.7	822.4	890.7	865.1	951.9	1863.9	2451.6	2263.7	1550.9
82.5°	614.7	617.5	757.0	751.3	701.5	668.7	668.7	1098.4	1299.1	1200.9	907.8
85°	345.7	344.3	488.0	589.1	617.5	471.0	466.7	614.7	707.2	623.2	439.7
87.5°	148.0	150.8	226.2	261.8	350.0	293.1	288.8	317.3	360.0	311.6	203.5
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°	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3	4015.3
2.5°	4016.7	3979.7	3898.6	3797.6	3706.5	3646.7	3592.7	3514.4	3518.7	3464.6	3424.8
5°	4013.8	3937.0	3749.2	3525.8	3310.9	3155.9	3039.2	2933.9	2908.3	2858.5	2828.6
7.5°	4016.7	3891.5	3575.6	3218.5	2952.4	2756.0	2656.4	2601.0	2588.1	2571.1	2572.5
10°	4026.6	3850.2	3384.9	2931.0	2652.2	2522.7	2498.5	2515.6	2535.5	2541.2	2542.6
12.5°	4049.4	3813.2	3175.8	2674.9	2464.4	2424.5	2465.8	2524.1	2562.5	2581.0	2579.6
15°	4100.6	3784.8	2975.2	2474.3	2360.5	2381.8	2458.7	2541.2	2596.7	2622.3	2623.7
17.5°	4156.1	3743.5	2768.8	2320.7	2283.7	2337.7	2433.1	2529.8	2598.1	2626.6	2632.3
20°	4228.7	3692.3	2552.6	2205.4	2211.1	2272.3	2361.9	2458.7	2534.1	2558.3	2569.6
22.5°	4324.0	3636.8	2363.3	2111.5	2128.6	2175.5	2245.2	2329.2	2394.6	2406.0	2416.0
25°	4452.1	3577.0	2212.5	2026.1	2033.2	2060.3	2107.2	2157.0	2202.6	2189.7	2199.7
27.5°	4624.2	3525.8	2100.1	1947.9	1935.1	1940.8	1964.9	1980.6	2004.8	1969.2	1973.5
30°	4826.3	3470.3	2013.3	1879.6	1844.0	1834.0	1839.7	1848.3	1866.8	1818.4	1811.3
32.5°	5061.0	3403.4	1932.2	1819.8	1770.0	1750.1	1752.9	1775.7	1846.8	1817.0	1801.3
35°	5334.2	3328.0	1846.8	1754.4	1720.2	1691.8	1688.9	1760.1	1972.1	1953.6	1939.3
37.5°	5654.4	3252.6	1761.5	1680.4	1683.2	1651.9	1642.0	1723.1	1996.2	1923.7	1913.7
40°	6061.3	3212.8	1688.9	1602.1	1637.7	1633.4	1613.5	1654.8	1836.9	1704.6	1687.5
42.5°	6565.0	3218.5	1634.8	1518.2	1583.6	1629.2	1597.8	1599.3	1664.7	1565.1	1549.5
45°	7186.8	3285.3	1596.4	1451.3	1522.4	1624.9	1592.2	1569.4	1575.1	1522.4	1513.9
47.5°	7912.4	3423.4	1569.4	1395.8	1464.1	1609.2	1590.7	1560.9	1548.0	1519.6	1512.5
50°	8719.2	3624.0	1549.5	1343.2	1411.5	1583.6	1592.2	1552.3	1538.1	1526.7	1522.4
52.5°	9511.7	3853.0	1519.6	1297.6	1370.2	1552.3	1596.4	1543.8	1528.1	1519.6	1515.3
55°	10395.3	4139.0	1474.1	1259.2	1336.0	1512.5	1596.4	1531.0	1513.9	1515.3	1513.9
57.5°	11589.0	4601.5	1420.0	1226.5	1294.8	1464.1	1569.4	1516.7	1495.4	1496.8	1498.2
60°	13454.4	5416.7	1354.5	1193.8	1243.6	1407.2	1532.4	1485.4	1464.1	1469.8	1471.2
62.5°	16197.6	6613.4	1269.2	1145.4	1189.5	1346.0	1481.2	1445.6	1424.3	1438.5	1438.5
65°	19049.0	7669.1	1163.9	1084.2	1132.6	1279.1	1417.1	1395.8	1374.5	1407.2	1405.8
67.5°	19815.9	7432.9	1058.6	1017.3	1075.7	1205.1	1340.3	1328.9	1317.5	1374.5	1371.6
70°	17603.4	5967.4	961.8	949.0	1013.1	1125.5	1257.8	1257.8	1250.7	1293.4	1283.4
72.5°	13411.7	4231.5	869.4	876.5	941.9	1038.7	1168.2	1178.1	1166.7	1188.1	1179.5
75°	7179.6	2421.7	776.9	796.8	853.7	950.5	1068.6	1078.5	1071.4	1070.0	1074.2
77.5°	2386.1	1183.8	680.1	711.4	761.2	859.4	964.7	980.3	963.3	960.4	959.0
80°	1062.9	744.1	573.4	614.7	658.8	755.5	855.1	867.9	849.4	875.0	842.3
82.5°	683.0	489.5	459.6	505.1	547.8	651.7	745.6	748.4	731.3	849.4	724.2
85°	331.5	303.1	345.7	387.0	424.0	512.2	617.5	618.9	576.2	525.0	506.5
87.5°	165.0	176.4	230.5	267.5	286.0	351.4	449.6	441.1	422.6	384.2	354.3
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)