

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: P191357

Luminaire Tested: **GLEON-AF-09-LED-E1-T2-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191357
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: GLEON-AF-09-LED-E1-T2-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35195.7 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G4

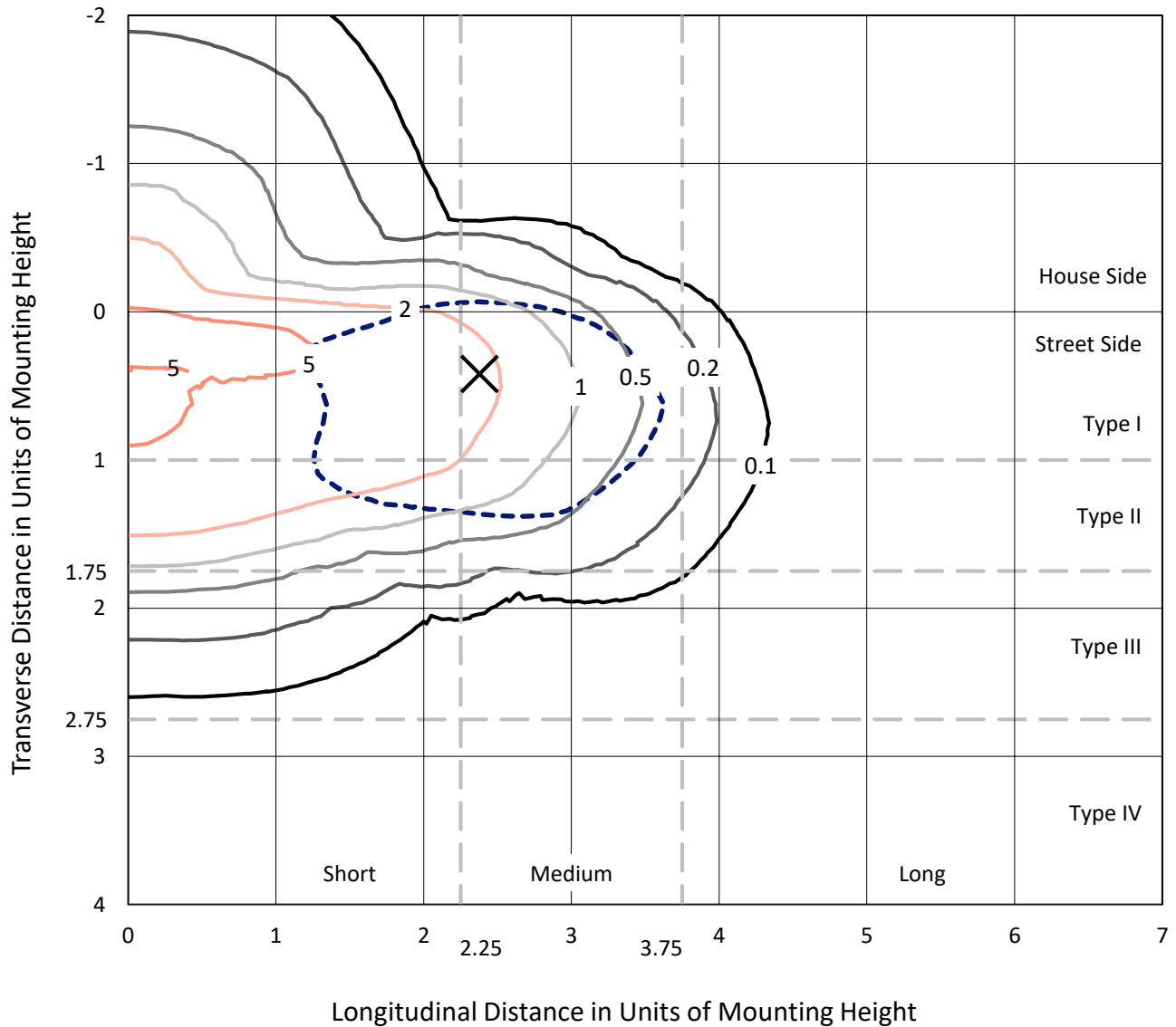
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

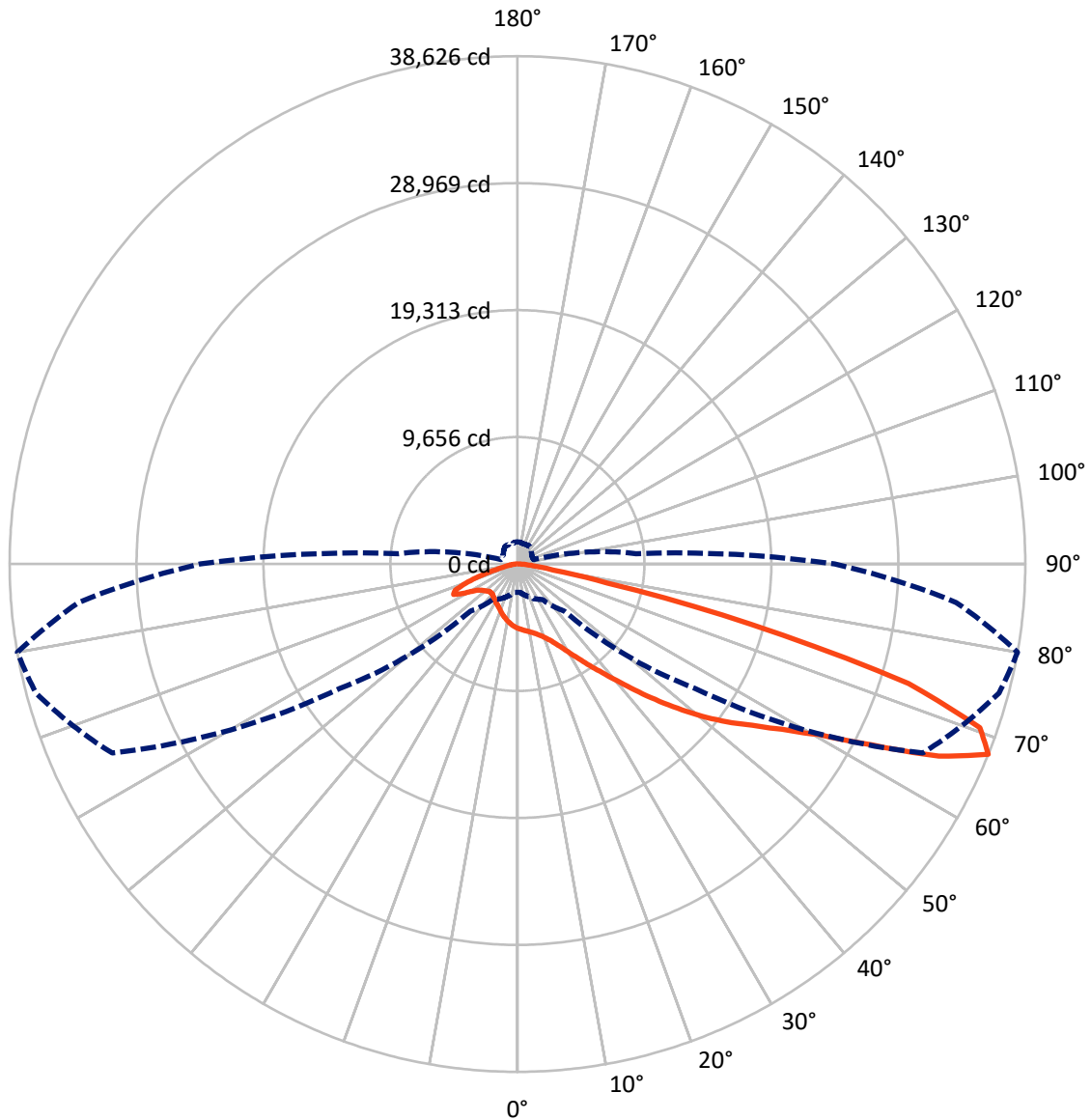
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.6 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
House Side	Lumens	6481.7	0.0	6481.7
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	28714.0	0.0	28714.0
	% Fixture	81.6	0.0	81.6
Total	Lumens	35195.7	0.0	35195.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	451.1	1.3
10°-20°	1299.3	3.7
20°-30°	2150.7	6.1
30°-40°	3518.0	10.0
40°-50°	5680.2	16.1
50°-60°	8200.5	23.3
60°-70°	9049.8	25.7
70°-80°	4171.4	11.9
80°-90°	674.7	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°	35195.7	100.0
0°-180°	35195.7	100.0



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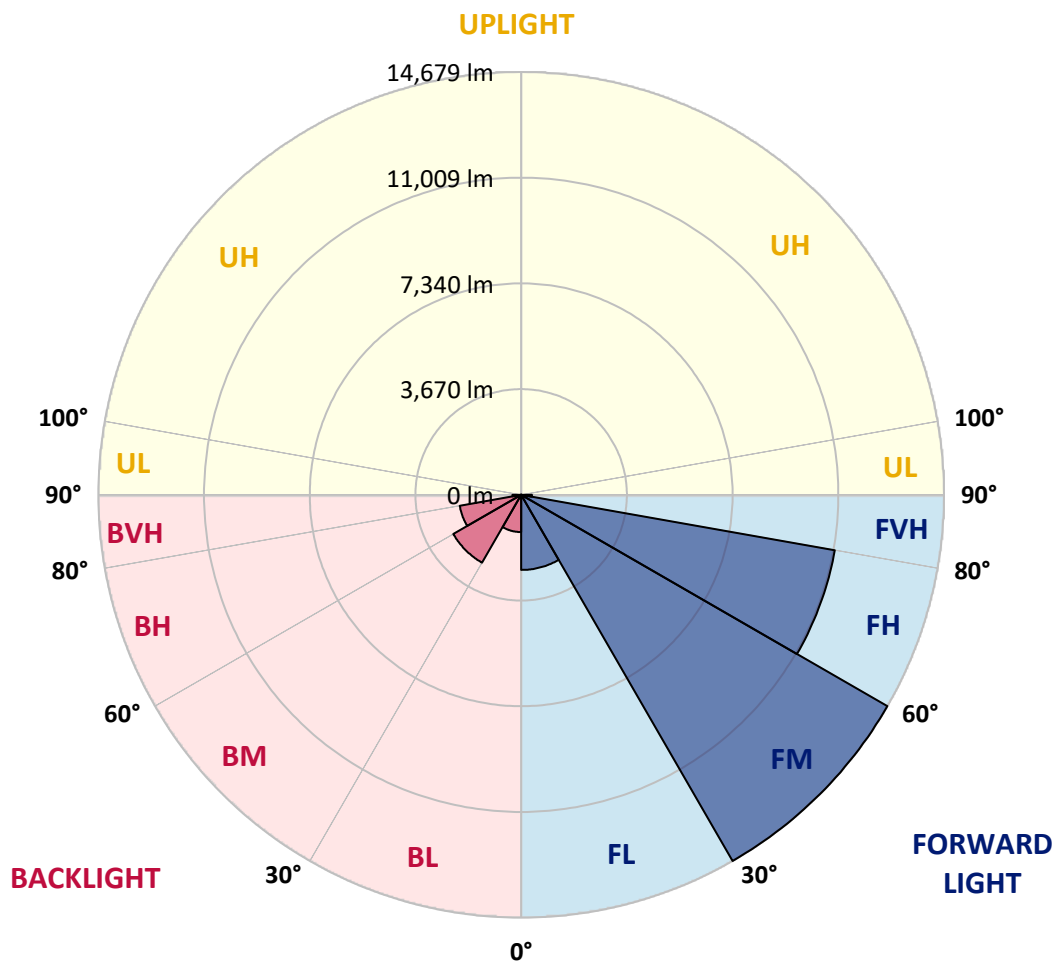
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2607.9	7.4			
FM (30°-60°)	14679.2	41.7			
FH (60°-80°)	11055.9	31.4			G4/12000
FVH (80°-90°)	370.9	1.1			G3/500
BL (0°-30°)	1293.2	3.7	B3/2500		
BM (30°-60°)	2719.5	7.7	B3/5000		
BH (60°-80°)	2165.3	6.2	B3/2500		G3/2500
BVH (80°-90°)	303.8	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°	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7
2.5°	5348.9	5317.7	5322.9	5314.2	5288.2	5243.1	5194.6	5106.3	5014.4	4965.9	4927.9
5°	5795.9	5787.2	5775.1	5747.3	5681.6	5588.0	5471.9	5316.0	5147.9	5059.5	4974.6
7.5°	6130.3	6125.1	6109.6	6092.2	6028.0	5915.4	5740.5	5518.7	5274.3	5153.1	5021.4
10°	6158.1	6166.7	6178.8	6225.6	6234.3	6173.6	5995.2	5726.6	5406.1	5250.1	5082.0
12.5°	5922.4	5941.5	5988.3	6107.8	6234.3	6308.7	6217.0	5944.9	5560.2	5371.4	5158.2
15°	5610.5	5620.9	5678.1	5842.7	6069.7	6300.1	6386.8	6185.8	5759.5	5527.3	5272.6
17.5°	5477.1	5482.3	5522.1	5631.3	5842.7	6171.9	6482.0	6447.4	6003.8	5721.4	5412.9
20°	5409.5	5421.6	5478.8	5586.2	5719.6	6007.3	6495.9	6729.8	6294.9	5964.0	5589.7
22.5°	5601.9	5596.7	5617.4	5671.1	5783.8	5957.1	6485.5	7020.9	6665.8	6275.9	5820.2
25°	6050.7	6069.7	6033.3	5972.6	6009.0	6130.3	6541.0	7336.3	7130.1	6676.1	6121.6
27.5°	6690.0	6671.0	6617.2	6475.2	6400.6	6452.6	6724.7	7675.9	7707.1	7202.9	6520.2
30°	7327.6	7312.1	7260.1	7086.8	6934.3	6891.0	7081.6	8065.8	8394.9	7835.3	7008.8
32.5°	7989.6	7972.2	7923.7	7750.4	7566.8	7466.2	7589.3	8516.3	9205.8	8590.7	7584.1
35°	8805.7	8772.7	8670.4	8429.6	8249.4	8171.4	8228.6	9082.9	10141.5	9484.8	8282.3
37.5°	9573.2	9623.4	9519.5	9186.8	8952.9	8925.1	8989.3	9774.2	11150.0	10484.6	9084.6
40°	10344.3	10352.9	10259.4	9987.3	9746.5	9701.5	9862.6	10612.8	12340.4	11680.2	10060.1
42.5°	11141.3	11158.7	11000.9	10749.7	10573.0	10581.6	10765.3	11595.2	13705.7	13088.9	11182.9
45°	12085.7	12111.6	11938.3	11609.2	11447.9	11772.0	11695.8	12697.3	15202.8	14689.9	12472.0
47.5°	13073.3	13113.1	12981.5	12673.0	12472.0	12917.3	12626.3	13918.9	16814.1	16407.0	13887.7
50°	13612.1	13669.3	13797.6	13775.1	13731.7	13657.2	13664.2	15228.8	18475.8	18195.1	15343.1
52.5°	13322.8	13321.1	13788.9	14357.2	14963.6	15008.7	14929.0	16609.8	20028.4	19943.4	16713.7
55°	11999.0	12089.1	12797.7	13898.0	15554.5	16588.9	16824.6	18191.6	21553.2	21651.9	18105.1
57.5°	9795.0	9869.5	10826.0	12359.4	14757.5	17528.1	19520.7	20491.0	23258.1	23719.1	19957.4
60°	6643.2	6733.3	7746.9	9588.8	12612.4	17004.8	22086.8	24594.1	25299.2	26347.5	22556.4
62.5°	3903.8	3985.2	4811.8	6048.9	8880.1	14573.8	23213.1	30431.6	28541.1	30313.7	26520.8
65°	2687.4	2742.8	3144.9	3765.2	5102.8	9815.8	21816.5	34461.8	33529.6	35227.7	31117.7
67.5°	2162.4	2155.5	2474.3	2897.1	3285.2	5061.3	16497.1	34006.1	37916.8	38625.5	33503.6
70°	1781.3	1774.3	1990.9	2340.9	2625.1	2850.4	8985.8	28697.0	37022.7	37310.4	31306.6
72.5°	1490.1	1497.1	1635.7	1895.6	2153.7	2146.9	3948.8	20187.7	29125.0	31114.2	24956.2
75°	1257.9	1261.4	1353.3	1536.9	1748.3	1729.2	2141.6	10936.9	16930.2	18314.7	13834.0
77.5°	1070.8	1074.3	1133.2	1235.4	1386.2	1379.2	1562.9	4725.1	7062.6	6975.9	4732.1
80°	954.7	954.7	982.4	1001.5	1084.6	1053.4	1159.2	2269.8	2985.5	2756.8	1888.7
82.5°	748.5	752.0	921.8	914.8	854.3	814.4	814.4	1337.6	1582.0	1462.4	1105.5
85°	421.0	419.3	594.3	717.3	752.0	573.6	568.4	748.5	861.1	758.9	535.4
87.5°	180.2	183.6	275.5	318.9	426.3	356.9	351.7	386.4	438.3	379.4	247.8
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°	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7	4889.7
2.5°	4891.4	4846.3	4747.6	4624.6	4513.7	4440.9	4375.1	4279.8	4284.9	4219.2	4170.7
5°	4888.0	4794.4	4565.6	4293.6	4032.0	3843.1	3701.0	3572.9	3541.7	3481.0	3444.6
7.5°	4891.4	4738.9	4354.3	3919.3	3595.4	3356.3	3235.0	3167.4	3151.8	3131.0	3132.7
10°	4903.5	4688.7	4122.1	3569.4	3229.8	3072.1	3042.7	3063.4	3087.7	3094.6	3096.4
12.5°	4931.2	4643.7	3867.4	3257.5	3001.0	2952.5	3002.8	3073.9	3120.6	3143.1	3141.4
15°	4993.6	4609.0	3623.1	3013.2	2874.6	2900.6	2994.1	3094.6	3162.1	3193.3	3195.1
17.5°	5061.3	4558.8	3371.9	2826.0	2781.0	2846.9	2963.0	3080.7	3163.9	3198.6	3205.5
20°	5149.6	4496.4	3108.4	2685.7	2692.6	2767.1	2876.3	2994.1	3085.9	3115.4	3129.3
22.5°	5265.7	4428.8	2878.1	2571.3	2592.2	2649.3	2734.2	2836.4	2916.1	2930.0	2942.1
25°	5421.6	4356.0	2694.4	2467.4	2476.1	2509.0	2566.2	2626.7	2682.3	2666.6	2678.8
27.5°	5631.3	4293.6	2557.5	2372.1	2356.5	2363.4	2392.9	2411.9	2441.4	2398.1	2403.2
30°	5877.4	4226.1	2451.8	2289.0	2245.6	2233.4	2240.4	2250.8	2273.3	2214.4	2205.7
32.5°	6163.3	4144.6	2353.0	2216.1	2155.5	2131.2	2134.7	2162.4	2249.1	2212.6	2193.6
35°	6495.9	4052.8	2249.1	2136.4	2094.8	2060.2	2056.7	2143.4	2401.6	2379.0	2361.7
37.5°	6885.8	3961.0	2145.1	2046.3	2049.8	2011.6	1999.6	2098.3	2430.9	2342.7	2330.5
40°	7381.3	3912.5	2056.7	1951.1	1994.3	1989.1	1964.9	2015.1	2236.9	2075.8	2055.0
42.5°	7994.7	3919.3	1990.9	1848.8	1928.5	1983.9	1945.9	1947.6	2027.3	1906.0	1886.9
45°	8751.9	4000.9	1944.1	1767.4	1854.0	1978.8	1938.9	1911.2	1918.1	1854.0	1843.6
47.5°	9635.6	4168.9	1911.2	1699.7	1783.0	1959.7	1937.2	1900.7	1885.2	1850.5	1841.8
50°	10618.0	4413.2	1886.9	1635.7	1718.9	1928.5	1938.9	1890.4	1873.0	1859.2	1854.0
52.5°	11583.2	4692.2	1850.5	1580.3	1668.6	1890.4	1944.1	1880.0	1861.0	1850.5	1845.3
55°	12659.1	5040.5	1795.1	1533.4	1627.0	1841.8	1944.1	1864.4	1843.6	1845.3	1843.6
57.5°	14112.9	5603.6	1729.2	1493.6	1576.8	1783.0	1911.2	1847.0	1821.1	1822.8	1824.5
60°	16384.5	6596.4	1649.5	1453.7	1514.4	1713.6	1866.2	1809.0	1783.0	1789.9	1791.6
62.5°	19725.2	8053.6	1545.6	1394.8	1448.5	1639.2	1803.8	1760.4	1734.4	1751.8	1751.8
65°	23197.5	9339.3	1417.4	1320.3	1379.2	1557.7	1725.8	1699.7	1673.8	1713.6	1711.9
67.5°	24131.4	9051.7	1289.1	1238.9	1309.9	1467.6	1632.2	1618.3	1604.5	1673.8	1670.4
70°	21437.1	7266.9	1171.3	1155.7	1233.7	1370.5	1531.7	1531.7	1523.1	1575.0	1562.9
72.5°	16332.5	5153.1	1058.7	1067.3	1147.0	1264.9	1422.5	1434.7	1420.8	1446.8	1436.4
75°	8743.3	2949.1	946.0	970.3	1039.6	1157.5	1301.3	1313.4	1304.8	1303.0	1308.1
77.5°	2905.8	1441.6	828.3	866.3	927.0	1046.6	1174.8	1193.9	1173.0	1169.5	1167.8
80°	1294.3	906.2	698.3	748.5	802.2	920.0	1041.4	1056.9	1034.4	1065.6	1025.7
82.5°	831.7	596.1	559.7	615.1	667.1	793.6	908.0	911.4	890.6	1034.4	882.0
85°	403.8	369.1	421.0	471.3	516.4	623.8	752.0	753.7	701.7	639.3	616.8
87.5°	201.0	214.8	280.7	325.7	348.3	428.0	547.6	537.2	514.6	467.8	431.5
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)