

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: P300391

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
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-AFL-7027-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30215.4 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

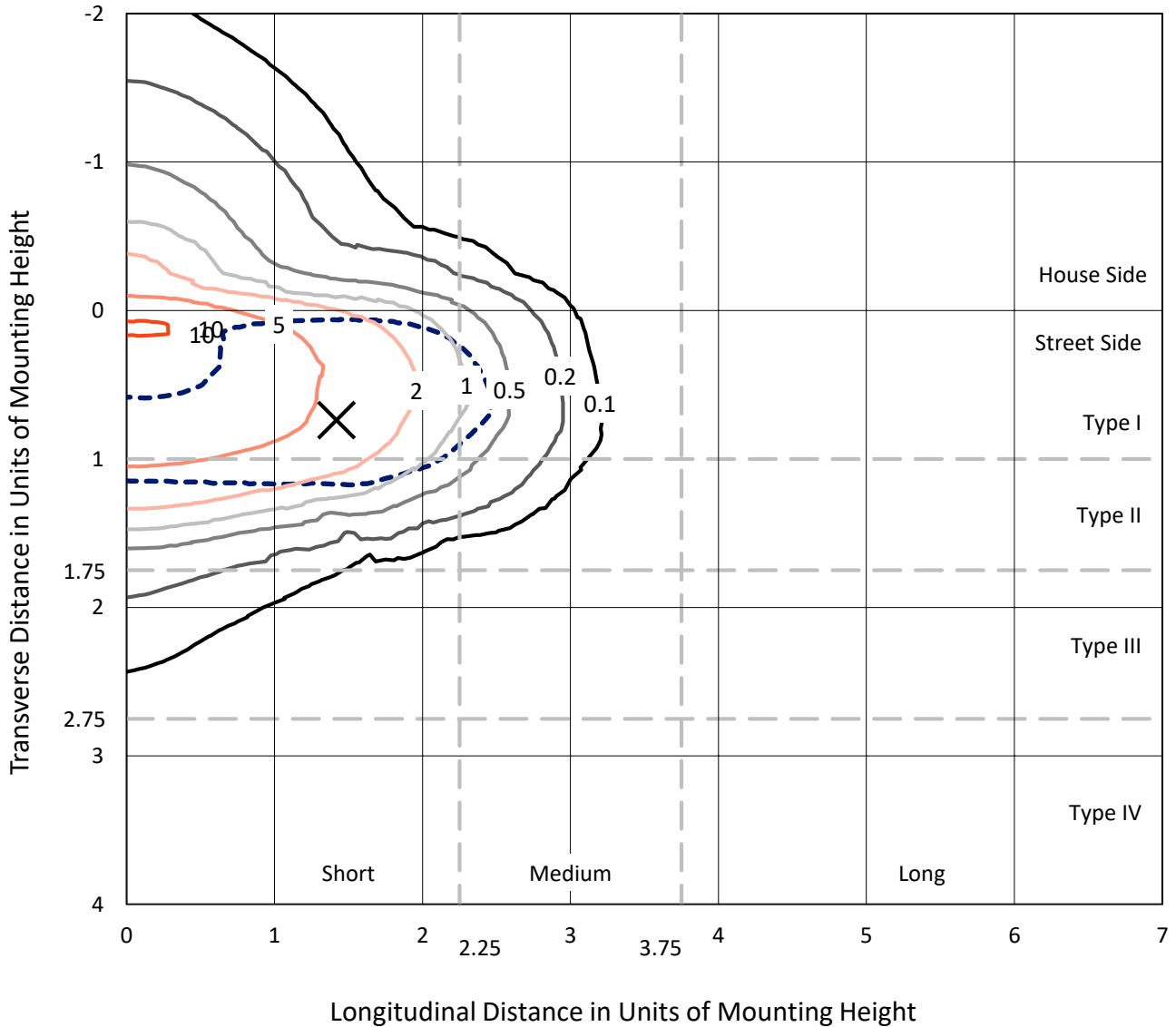
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

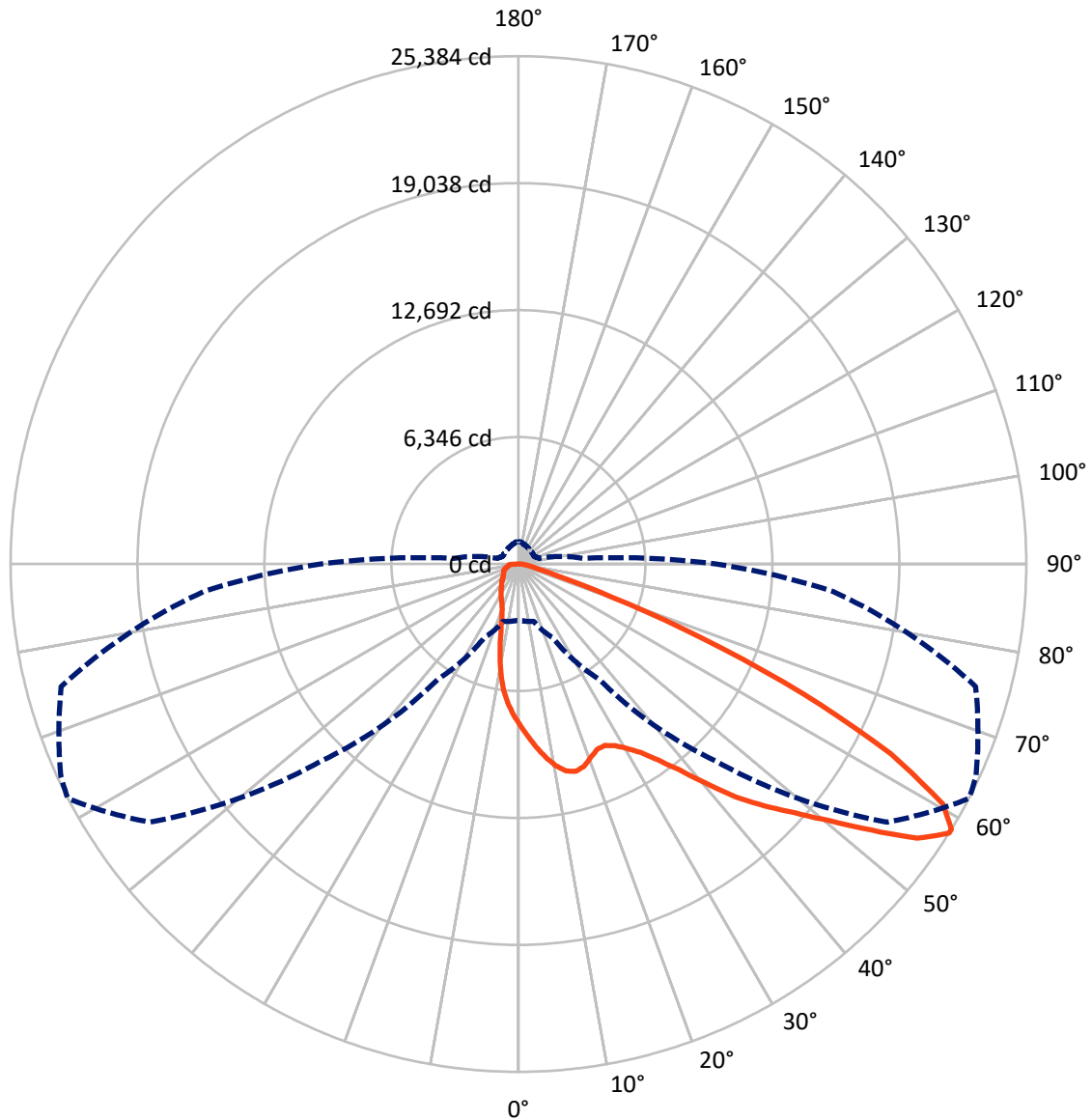
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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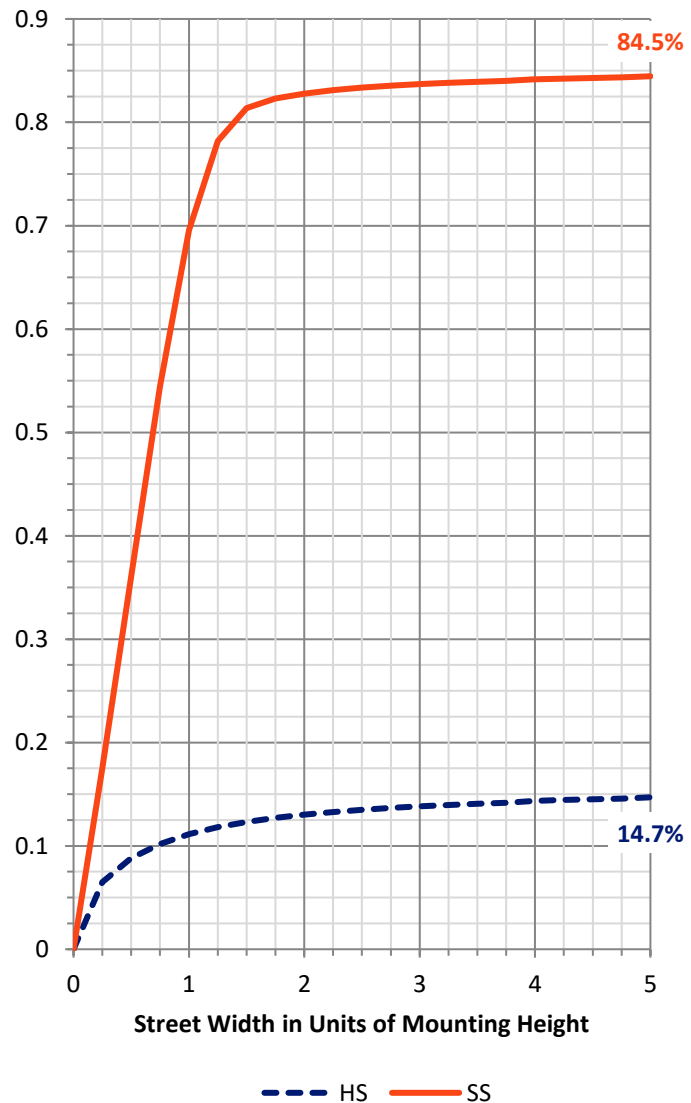
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4608.0	0.0	4608.0
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	25607.4	0.0	25607.4
	% Fixture	84.7	0.0	84.7
Total	Lumens	30215.4	0.0	30215.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	717.8	2.4
10°-20°	1834.8	6.1
20°-30°	2966.1	9.8
30°-40°	4708.7	15.6
40°-50°	6889.7	22.8
50°-60°	7206.1	23.8
60°-70°	4257.4	14.1
70°-80°	1199.3	4.0
80°-90°	435.4	1.4
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°	30215.4	100.0
0°-180°	30215.4	100.0



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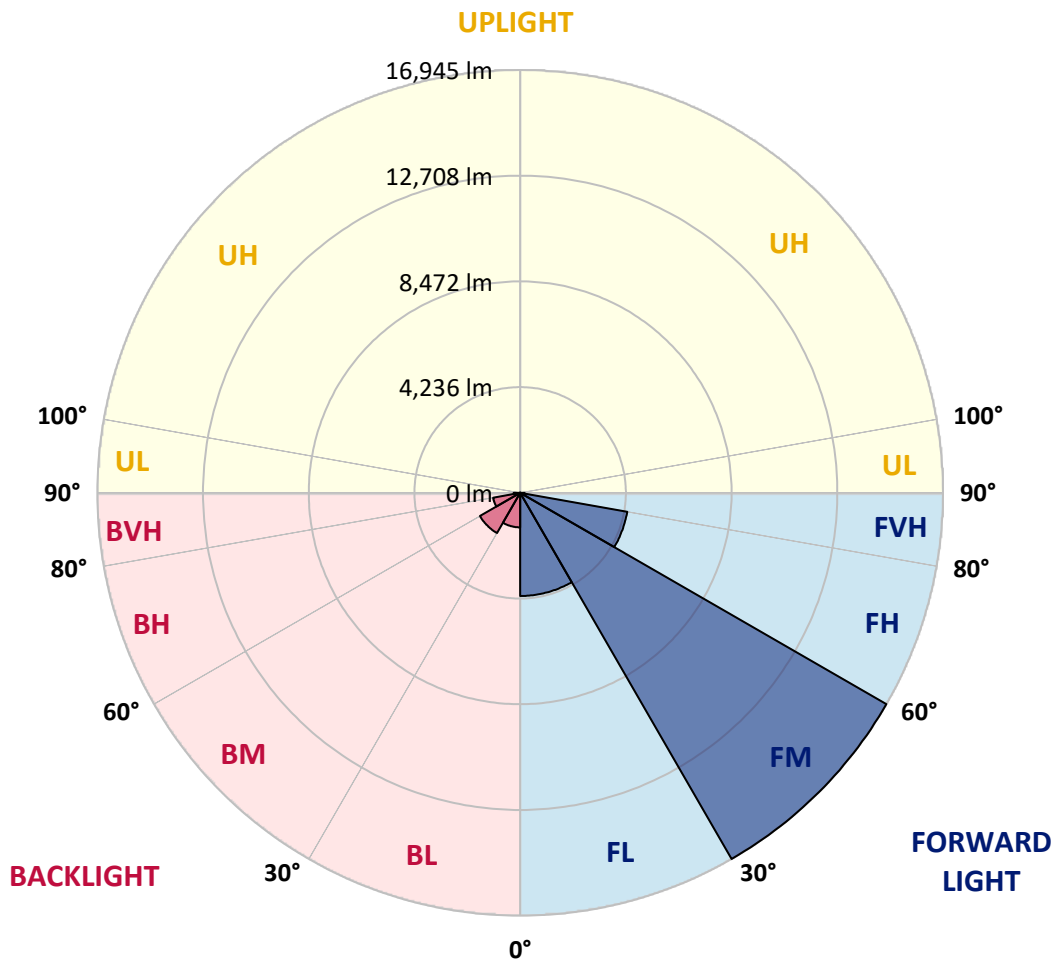
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4133.8	13.7			
FM (30°-60°)	16944.6	56.1			
FH (60°-80°)	4357.2	14.4			G2/5000
FVH (80°-90°)	171.8	0.6			G2/225
BL (0°-30°)	1384.9	4.6	B3/2500		
BM (30°-60°)	1859.9	6.2	B2/2500		
BH (60°-80°)	1099.5	3.6	B3/2500		G3/2500
BVH (80°-90°)	263.6	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1
2.5°	9171.5	9097.5	9050.5	9009.3	8955.2	8839.9	8684.9	8586.7	8536.9	8367.6	8167.0
5°	10070.7	10005.2	9956.8	9901.4	9804.6	9623.9	9373.5	9174.3	9076.1	8737.5	8336.3
7.5°	9860.1	9887.1	9971.1	10117.6	10242.8	10218.6	9995.3	9742.0	9612.5	9141.6	8532.6
10°	8590.9	8637.9	8783.0	9125.9	9680.8	10249.9	10423.5	10248.5	10117.6	9541.4	8734.7
12.5°	8336.3	8334.8	8346.2	8437.3	8767.4	9568.4	10437.8	10614.2	10535.9	9922.7	8941.0
15°	8440.1	8443.0	8434.4	8472.9	8575.3	8892.6	10002.4	10755.0	10810.5	10306.9	9154.4
17.5°	8713.3	8706.2	8673.5	8673.5	8710.5	8834.2	9490.2	10624.1	10880.3	10646.9	9342.2
20°	9171.5	9138.7	9051.9	8972.3	8932.4	8999.3	9279.6	10322.5	10759.3	10944.3	9497.3
22.5°	9726.4	9700.7	9559.9	9389.1	9251.1	9249.7	9387.7	10059.3	10550.2	11224.6	9628.2
25°	10443.5	10402.2	10193.0	9919.9	9678.0	9585.5	9623.9	10046.5	10436.3	11529.1	9744.9
27.5°	11285.8	11210.3	10962.8	10568.7	10213.0	10026.6	9971.1	10278.4	10540.2	11906.1	9907.1
30°	12307.3	12220.5	11903.3	11389.6	10887.4	10581.5	10463.4	10689.6	10884.5	12365.7	10167.4
32.5°	13469.8	13344.6	12977.5	12411.2	11751.0	11284.3	11092.3	11233.1	11388.2	12919.1	10493.3
35°	15076.1	14926.7	14396.0	13614.9	12869.3	12227.7	11920.3	12022.8	12173.6	13744.4	10964.2
37.5°	16171.7	16104.8	15752.0	15017.8	14206.8	13468.4	12993.1	13052.9	13138.3	14775.9	11567.5
40°	16161.7	16188.8	16195.9	16203.0	15650.9	14943.8	14433.0	14370.4	14353.3	15908.5	12253.3
42.5°	15352.2	15463.1	15821.7	16548.7	16884.5	16560.1	16092.0	15911.3	15821.7	17243.1	12980.3
45°	14112.9	14172.6	14844.2	16264.2	17516.3	18160.8	17806.5	17237.4	17075.2	18469.5	13583.6
47.5°	13474.0	13539.5	13962.1	15510.1	17509.1	19454.1	19659.0	18574.8	18284.6	19536.7	14104.4
50°	11953.1	12089.6	12621.8	14198.3	16870.3	20048.9	21595.5	20168.4	19568.0	20575.3	14626.5
52.5°	9160.1	9370.7	9966.8	12041.3	15249.7	19754.3	23144.9	22100.6	21252.6	21651.0	15074.7
55°	5778.0	5934.6	6435.4	8504.2	12199.2	18222.0	23732.5	24190.7	23436.6	22669.7	15463.1
57.5°	3141.6	3211.3	3399.1	4695.3	7935.0	14834.3	22876.0	25380.1	25067.1	23534.8	15756.2
58°	2811.5	2858.4	2975.1	4069.2	7037.2	13908.0	22496.1	25384.4	25227.9	23661.4	15779.0
60°	2085.8	2061.7	1957.8	2322.0	3917.0	9608.3	20199.7	24368.5	24828.1	23816.5	15668.0
62.5°	1832.6	1774.2	1562.2	1538.1	1905.1	4426.4	15456.0	20874.1	21959.7	22931.5	14993.6
65°	1721.6	1659.0	1385.8	1297.6	1374.4	1872.4	9104.6	15655.2	17016.9	20248.1	13269.2
67.5°	1639.1	1558.0	1273.4	1152.5	1158.2	1237.8	3649.5	9860.1	11392.5	15373.5	10321.1
70°	1559.4	1471.2	1178.1	1038.7	1005.9	978.9	1451.3	4935.7	6325.8	9710.7	6580.5
72.5°	1474.0	1387.2	1094.1	949.0	885.0	795.4	947.6	2019.0	2820.0	4594.3	2985.1
75°	1350.3	1272.0	1010.2	869.3	778.3	658.8	715.7	1054.3	1264.9	1829.7	1438.5
77.5°	1198.0	1134.0	916.3	803.9	690.1	535.0	550.6	731.3	811.0	1047.2	855.1
80°	860.8	883.6	815.3	722.8	614.7	434.0	422.6	533.6	576.2	673.0	556.3
82.5°	604.7	617.5	674.4	590.5	507.9	341.5	311.6	375.6	401.2	442.5	300.2
85°	416.9	402.7	462.4	411.2	367.1	227.7	213.4	254.7	270.3	274.6	155.1
87.5°	250.4	250.4	267.5	220.5	197.8	118.1	115.2	145.1	155.1	148.0	85.4
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°	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1	8026.1
2.5°	8047.4	7946.4	7731.6	7559.4	7341.7	7115.5	6988.9	6853.7	6761.2	6694.3	6801.0
5°	8108.6	7902.3	7458.4	7037.2	6572.0	6088.2	5721.1	5379.7	5142.0	4994.1	5133.5
7.5°	8205.4	7888.1	7180.9	6461.0	5625.8	4820.5	4100.5	3649.5	3386.3	3256.8	3337.9
10°	8316.3	7865.3	6855.1	5679.9	4484.7	3470.2	2932.4	2750.3	2690.5	2666.4	2677.7
12.5°	8408.8	7816.9	6455.3	4735.1	3367.8	2740.3	2585.3	2581.0	2593.8	2596.6	2600.9
15°	8474.3	7745.8	5862.0	3750.5	2693.4	2497.0	2488.5	2514.1	2538.3	2548.3	2554.0
17.5°	8518.4	7599.2	5191.8	2965.1	2413.1	2378.9	2398.9	2431.6	2457.2	2464.3	2470.0
20°	8514.1	7384.4	4393.6	2472.9	2260.9	2260.9	2295.0	2320.6	2322.0	2313.5	2317.8
22.5°	8470.0	7089.9	3619.6	2211.1	2125.7	2149.9	2184.0	2159.8	2060.2	1994.8	1999.1
25°	8396.0	6738.4	2956.6	2044.6	2000.5	2043.2	2033.2	1851.1	1708.8	1644.8	1644.8
27.5°	8330.6	6323.0	2447.2	1899.5	1875.3	1927.9	1751.5	1586.4	1526.7	1496.8	1486.8
30°	8283.6	5874.8	2107.2	1760.0	1757.2	1718.8	1519.6	1474.0	1464.1	1439.9	1431.4
32.5°	8295.0	5420.9	1889.5	1637.7	1647.6	1471.2	1408.6	1418.5	1410.0	1384.4	1373.0
35°	8388.9	4989.8	1747.2	1526.7	1496.8	1328.9	1343.1	1361.6	1358.8	1323.2	1311.8
37.5°	8556.8	4581.5	1653.3	1434.2	1306.1	1257.8	1280.5	1309.0	1301.9	1277.7	1269.1
40°	8733.2	4197.3	1576.5	1361.6	1193.7	1209.4	1229.3	1245.0	1252.1	1259.2	1253.5
42.5°	8905.4	3796.1	1482.6	1287.6	1146.8	1163.9	1172.4	1188.0	1226.5	1253.5	1252.1
45°	9007.8	3419.0	1385.8	1182.4	1109.8	1119.8	1114.1	1145.4	1192.3	1236.4	1237.8
47.5°	9121.7	3125.9	1309.0	1085.6	1074.2	1081.3	1064.3	1095.6	1138.3	1192.3	1198.0
50°	9259.7	2950.9	1247.8	1008.8	1025.8	1025.8	1021.6	1050.0	1109.8	1172.4	1183.8
52.5°	9416.2	2916.8	1196.6	953.3	977.5	976.1	980.3	1023.0	1088.5	1149.6	1159.6
55°	9606.8	3009.3	1141.1	912.0	930.5	936.2	950.4	998.8	1054.3	1124.0	1128.3
57.5°	9828.8	3197.1	1097.0	879.3	887.8	906.3	929.1	973.2	1033.0	1109.8	1114.1
58°	9865.8	3236.9	1089.9	876.5	879.3	900.6	926.3	968.9	1028.7	1112.6	1116.9
60°	9867.2	3369.2	1074.2	863.6	846.6	882.1	910.6	953.3	1021.6	1122.6	1132.6
62.5°	9517.2	3367.8	1062.8	845.2	812.4	856.5	889.3	939.1	1014.5	1146.8	1166.7
65°	8380.4	3060.5	1008.8	816.7	785.4	833.8	870.8	929.1	1034.4	1252.1	1264.9
67.5°	6554.9	2508.4	907.8	776.9	749.8	811.0	859.4	927.7	1055.7	1276.3	1284.8
70°	4333.9	1876.7	796.8	731.3	712.8	784.0	865.1	976.1	1031.5	1225.0	1202.3
72.5°	2249.5	1317.5	707.1	674.4	670.1	759.8	947.6	970.4	1007.4	1152.5	1124.0
75°	1180.9	914.9	628.9	611.8	618.9	754.1	1118.3	944.7	976.1	1102.7	1156.7
77.5°	722.8	738.4	562.0	554.9	569.1	737.0	1116.9	912.0	930.5	1014.5	1074.2
80°	483.8	599.0	510.8	512.2	522.2	674.4	1003.1	860.8	875.0	959.0	1020.2
82.5°	305.9	354.3	463.8	488.0	475.2	556.3	852.3	784.0	803.9	1097.0	1159.6
85°	155.1	222.0	402.7	469.5	428.3	389.9	691.5	687.2	697.2	791.1	826.7
87.5°	71.1	122.4	314.4	409.8	323.0	243.3	502.3	509.4	549.2	562.0	562.0
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)