

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: P302936

Luminaire Tested: **GLNA-AF-10-LED-E1-T4W-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302936
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-10-LED-E1-T4W-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33372.4 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

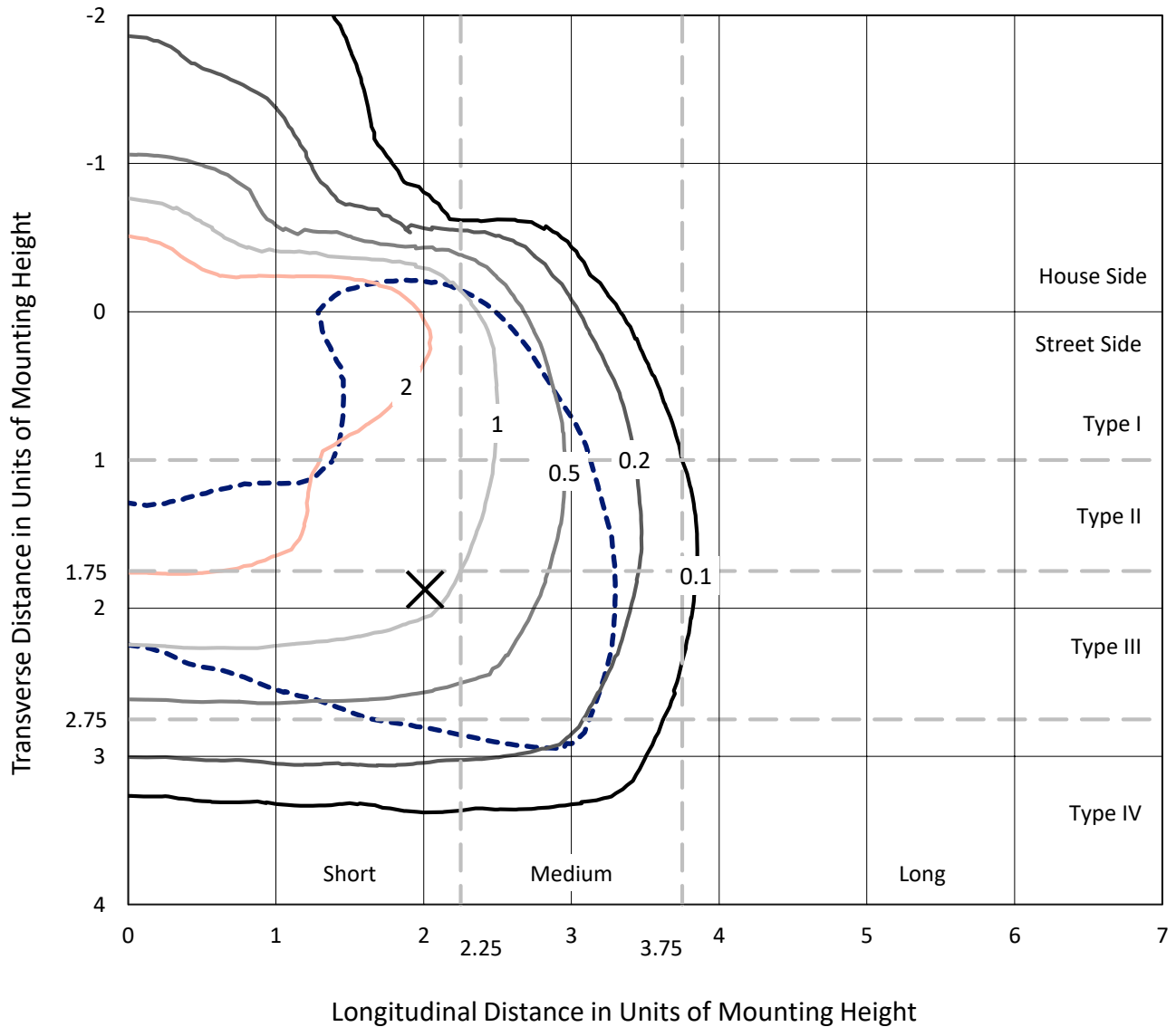
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P302936
 CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

Iso-Footcandle Lines of Horizontal Illumination

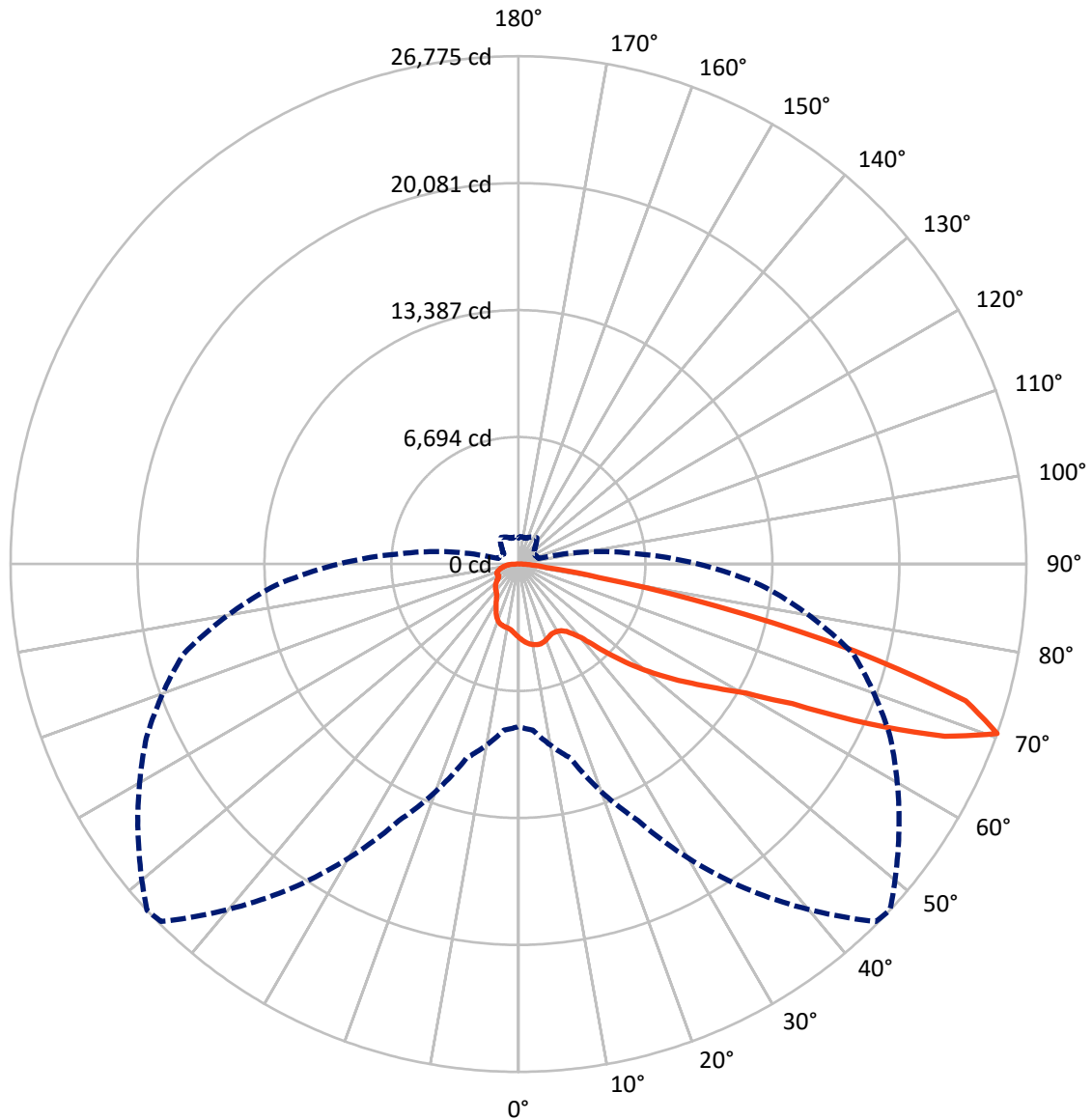
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P302936
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P302936

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

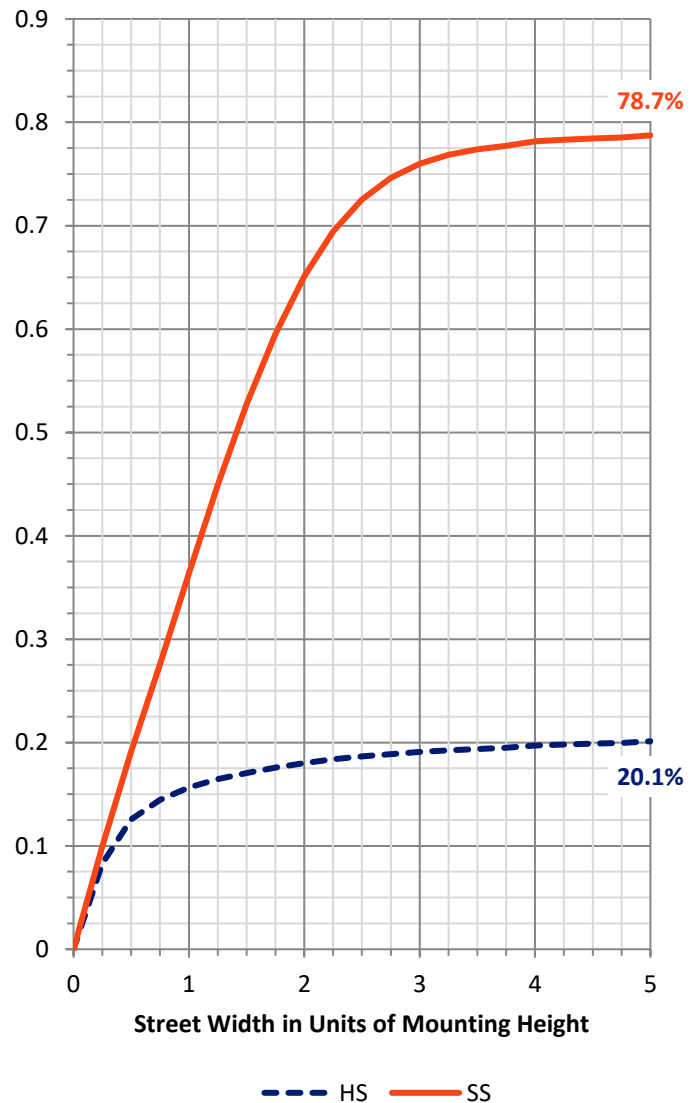
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6962.1	0.0	6962.1
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	26410.2	0.0	26410.2
	% Fixture	79.1	0.0	79.1
Total	Lumens	33372.4	0.0	33372.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.0	1.1
10°-20°	1088.5	3.3
20°-30°	1607.4	4.8
30°-40°	2336.3	7.0
40°-50°	4204.6	12.6
50°-60°	7284.0	21.8
60°-70°	10396.4	31.2
70°-80°	5336.9	16.0
80°-90°	747.2	2.2
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°	33372.4	100.0
0°-180°	33372.4	100.0

Coefficient of Utilization



REPORT NUMBER: P302936

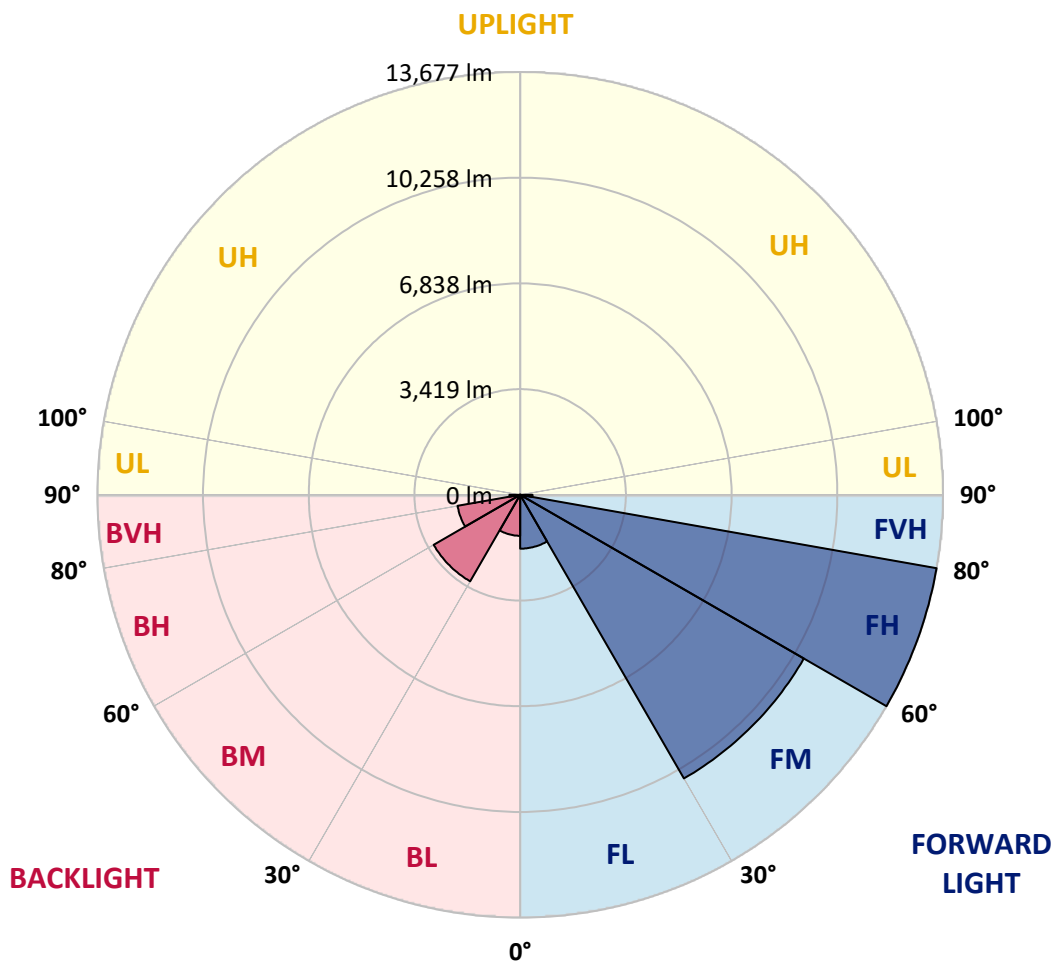
CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1741.3	5.2			
FM	(30°-60°)	10593.3	31.7			
FH	(60°-80°)	13676.9	41.0			G5
FVH	(80°-90°)	398.7	1.2			G3/500
BL	(0°-30°)	1325.6	4.0	B3/2500		
BM	(30°-60°)	3231.6	9.7	B3/5000		
BH	(60°-80°)	2056.4	6.2	B3/2500		G3/2500
BVH	(80°-90°)	348.5	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P302936

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1
2.5°	4099.7	4091.6	4088.4	4081.9	4073.8	4032.8	4024.7	3995.6	3955.2	3912.6	3868.9
5°	4369.3	4367.7	4349.4	4317.0	4265.2	4175.7	4154.7	4083.5	3987.5	3894.8	3802.6
7.5°	4606.0	4591.5	4557.5	4492.3	4401.7	4279.8	4250.7	4151.5	4019.9	3893.2	3768.1
10°	4779.7	4771.6	4697.2	4607.6	4489.0	4354.2	4320.2	4209.7	4065.2	3904.5	3748.7
12.5°	4878.9	4862.7	4776.4	4669.7	4528.4	4396.8	4362.3	4250.7	4088.4	3904.5	3721.2
15°	4872.4	4861.1	4774.8	4657.8	4515.4	4400.0	4369.3	4257.2	4083.5	3888.3	3685.6
17.5°	4742.5	4747.3	4674.5	4559.1	4442.1	4354.2	4326.7	4223.2	4050.6	3856.0	3643.5
20°	4515.4	4538.1	4489.0	4387.1	4321.9	4262.0	4244.2	4156.3	4000.5	3809.1	3597.7
22.5°	4287.9	4308.9	4289.5	4203.2	4193.5	4157.9	4148.2	4085.1	3956.8	3779.9	3570.2
25°	4120.7	4140.1	4136.9	4062.0	4091.6	4090.0	4081.9	4050.6	3947.1	3779.9	3575.0
27.5°	4075.4	4081.9	4075.4	4007.0	4047.4	4080.3	4073.8	4068.4	3976.2	3826.9	3637.0
30°	4231.3	4221.6	4170.9	4032.8	4070.6	4115.9	4109.4	4112.6	4063.6	3950.3	3775.1
32.5°	4853.0	4808.8	4649.7	4262.0	4162.8	4187.1	4190.3	4244.2	4252.3	4140.1	3989.2
35°	5783.1	5734.6	5528.1	4875.6	4450.2	4366.1	4366.1	4447.0	4495.5	4413.0	4321.9
37.5°	6768.8	6714.9	6604.9	5726.5	5054.1	4676.1	4668.0	4724.7	4794.2	4814.2	4836.8
40°	7888.8	7832.2	7862.9	6681.0	5896.9	5213.2	5097.8	5057.4	5245.5	5370.6	5552.9
42.5°	9115.0	9088.6	9099.9	7744.3	6856.2	6017.2	5853.2	5643.5	5871.0	6093.2	6475.0
45°	10249.5	10272.2	10260.8	8882.6	7924.9	6997.5	6823.8	6417.8	6640.5	7021.7	7644.0
47.5°	11243.3	11148.9	11295.1	10126.0	9121.5	8095.3	7880.7	7337.2	7562.6	8033.3	9085.3
50°	12449.5	12436.6	12222.5	11785.8	10567.7	9197.5	8916.6	8286.8	8637.2	9291.9	10902.5
52.5°	13717.8	13482.1	13285.9	13076.1	12102.3	10327.7	9983.1	9233.1	9900.6	10723.5	13117.1
55°	13977.2	13872.0	14115.2	14467.8	13581.4	11501.6	11100.4	10419.9	11323.1	12360.6	15670.8
57.5°	14532.5	14530.9	15034.6	15662.8	15104.1	12746.6	12342.2	11853.7	12921.9	14235.4	18382.0
60°	14907.8	15013.0	15948.5	17167.7	16599.4	14185.3	13813.2	13508.0	14740.7	16331.4	20908.3
62.5°	15104.1	15247.0	16523.4	17778.1	18713.1	16580.0	16208.4	15768.4	17146.7	18630.6	22385.8
65°	14287.7	14568.1	16433.8	18306.0	20564.3	20461.8	20294.7	19522.0	20155.0	20447.3	21851.9
67.5°	12027.3	12314.7	14487.3	17813.7	21885.9	24206.2	24241.8	22921.8	22006.2	20603.1	18372.3
70°	8569.3	8794.7	10592.5	14935.3	20879.2	26652.6	26774.5	24488.2	21637.3	18271.5	12836.2
72.5°	4068.4	4206.5	5908.2	9720.5	16568.6	24420.2	24655.9	22488.2	18398.2	13527.4	7002.3
75°	1495.3	1537.3	1996.7	4135.3	9610.0	18008.9	18286.6	16120.6	12196.1	6734.9	2667.5
77.5°	896.2	923.7	1120.5	1745.5	3779.9	10293.7	10704.1	8767.2	5330.2	2506.8	1311.9
80°	626.6	646.0	803.4	1086.0	1785.9	3922.8	4287.9	3578.3	2123.5	1586.4	954.4
82.5°	423.8	433.5	565.1	733.9	1186.8	1400.9	1511.4	1591.2	1432.2	1180.4	605.5
85°	277.7	287.4	383.4	483.7	754.9	724.2	740.4	936.6	1045.5	801.8	335.9
87.5°	159.1	165.5	230.8	258.3	370.4	306.8	310.1	493.4	669.2	540.8	204.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P302936

CATALOG NUMBER: GLNA-AF-10-LED-E1-T4W-7027-600

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1	3872.1
2.5°	3857.6	3836.6	3789.6	3760.0	3732.5	3726.0	3714.7	3713.1	3711.5	3711.5	3706.6
5°	3771.3	3735.7	3662.9	3621.9	3588.0	3584.7	3583.1	3591.2	3594.4	3597.7	3592.8
7.5°	3716.3	3667.8	3576.7	3518.4	3478.0	3467.7	3484.4	3521.7	3545.9	3555.6	3550.8
10°	3682.3	3621.9	3516.8	3453.2	3419.2	3414.3	3435.4	3479.6	3529.7	3549.2	3547.5
12.5°	3643.5	3575.0	3462.9	3396.6	3377.1	3386.8	3414.3	3454.8	3507.1	3537.8	3539.4
15°	3604.2	3524.9	3409.5	3351.3	3343.2	3356.1	3382.0	3412.7	3453.2	3484.4	3487.7
17.5°	3557.2	3474.2	3359.3	3299.0	3292.5	3299.0	3300.6	3316.7	3343.2	3372.3	3380.4
20°	3507.1	3422.4	3302.2	3242.3	3213.2	3187.3	3157.7	3160.9	3169.0	3198.7	3205.1
22.5°	3471.0	3386.8	3258.5	3175.5	3097.8	3019.6	2961.4	2953.3	2956.5	2980.8	2988.9
25°	3474.2	3385.2	3247.2	3104.3	2933.9	2808.8	2730.6	2717.7	2716.1	2733.9	2745.7
27.5°	3537.8	3448.3	3289.2	3031.0	2755.4	2569.9	2487.4	2477.7	2464.8	2469.6	2482.6
30°	3679.1	3596.1	3391.7	2956.5	2561.8	2336.4	2250.2	2240.5	2222.7	2214.6	2224.3
32.5°	3909.4	3841.4	3541.1	2884.8	2368.8	2136.4	2049.0	2028.0	2016.7	2007.0	2015.1
35°	4292.7	4263.6	3740.6	2807.2	2198.4	1982.2	1902.9	1870.6	1854.4	1872.2	1885.1
37.5°	4893.4	4909.6	4002.1	2685.3	2066.8	1880.3	1813.4	1776.2	1751.9	1766.5	1781.0
40°	5744.3	5755.6	4291.1	2513.3	1953.1	1819.9	1748.7	1714.7	1680.2	1654.3	1652.7
42.5°	6861.1	6746.2	4575.3	2326.7	1821.5	1782.7	1703.4	1660.8	1609.0	1537.3	1522.8
45°	8185.9	7782.0	4791.0	2112.1	1673.7	1737.4	1652.7	1594.5	1513.1	1435.4	1427.3
47.5°	9712.5	8893.9	4896.7	1890.0	1535.7	1670.5	1591.2	1498.5	1396.0	1357.2	1352.4
50°	11576.0	10213.9	4946.8	1673.7	1416.0	1583.2	1501.7	1392.8	1307.1	1299.0	1294.1
52.5°	13698.4	11801.9	4963.5	1496.9	1316.8	1469.4	1428.9	1323.2	1254.8	1261.8	1261.8
55°	15919.4	13441.7	4742.5	1368.5	1225.6	1352.4	1379.9	1295.7	1238.6	1265.0	1274.7
57.5°	17958.2	14894.9	4047.4	1269.9	1139.9	1263.4	1362.1	1321.6	1282.8	1388.0	1394.4
60°	19523.6	15753.3	3022.9	1180.4	1076.3	1232.1	1409.5	1420.8	1430.6	1681.8	1716.3
62.5°	19851.4	15468.1	2078.2	1110.8	1047.2	1258.5	1495.3	1496.9	1485.6	1660.8	1681.8
65°	18346.5	13660.6	1511.4	1071.4	1022.9	1305.5	1568.6	1534.1	1459.7	1592.9	1553.5
67.5°	14569.8	10292.1	1258.5	1042.3	987.3	1302.2	1646.2	1568.6	1445.1	1560.5	1496.9
70°	9457.4	6223.2	1120.5	1018.0	944.7	1240.2	1691.5	1565.4	1402.5	1451.6	1376.6
72.5°	4614.1	2782.9	1027.8	982.5	901.0	1154.5	1689.9	1535.7	1358.8	1355.6	1315.2
75°	1805.3	1274.7	943.1	928.5	826.6	1056.9	1644.6	1493.6	1307.1	1254.8	1240.2
77.5°	1056.9	909.1	836.3	849.3	737.1	959.3	1578.3	1420.8	1235.4	1173.9	1157.7
80°	769.5	680.5	712.9	733.9	629.8	862.2	1488.8	1331.3	1156.1	1186.8	1164.2
82.5°	493.4	438.4	578.0	599.1	524.7	763.0	1391.2	1237.0	1043.9	948.0	925.3
85°	251.8	277.7	430.3	456.2	404.4	626.6	1273.1	1112.4	917.2	788.9	801.8
87.5°	141.3	189.8	274.5	306.8	285.8	482.1	1032.6	917.2	748.4	608.8	536.0
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)