

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: P191542

Luminaire Tested: **GLEON-AF-04-LED-E1-T4FT-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-T4FT-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27107.2 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

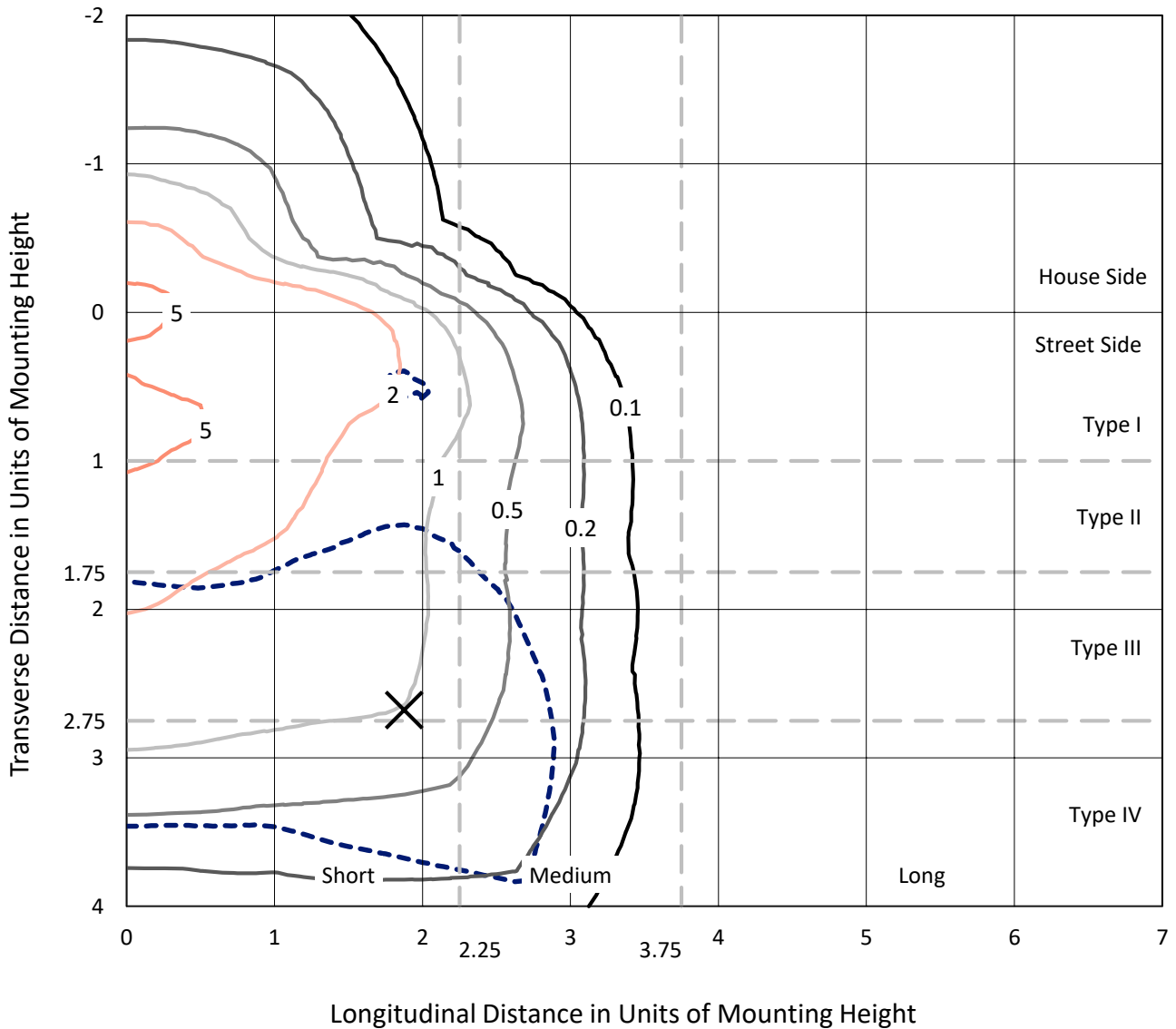
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

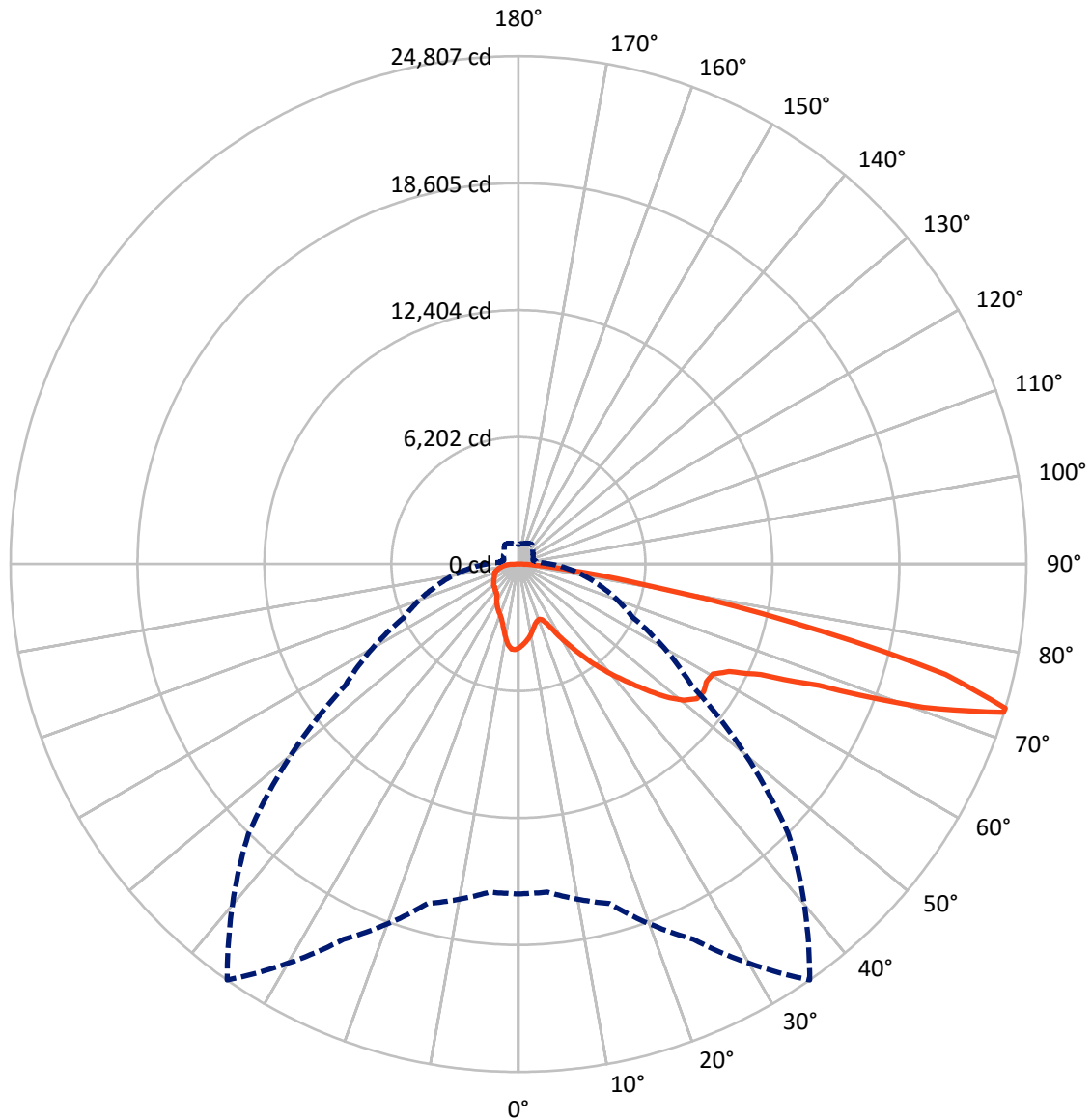
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5170.1	0.0	5170.1
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	21937.1	0.0	21937.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	27107.2	0.0	27107.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.4	1.4
10°-20°	924.4	3.4
20°-30°	1494.5	5.5
30°-40°	2506.0	9.2
40°-50°	3862.9	14.3
50°-60°	5182.4	19.1
60°-70°	6904.1	25.5
70°-80°	5265.7	19.4
80°-90°	596.9	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°	27107.2	100.0
0°-180°	27107.2	100.0

Coefficient of Utilization



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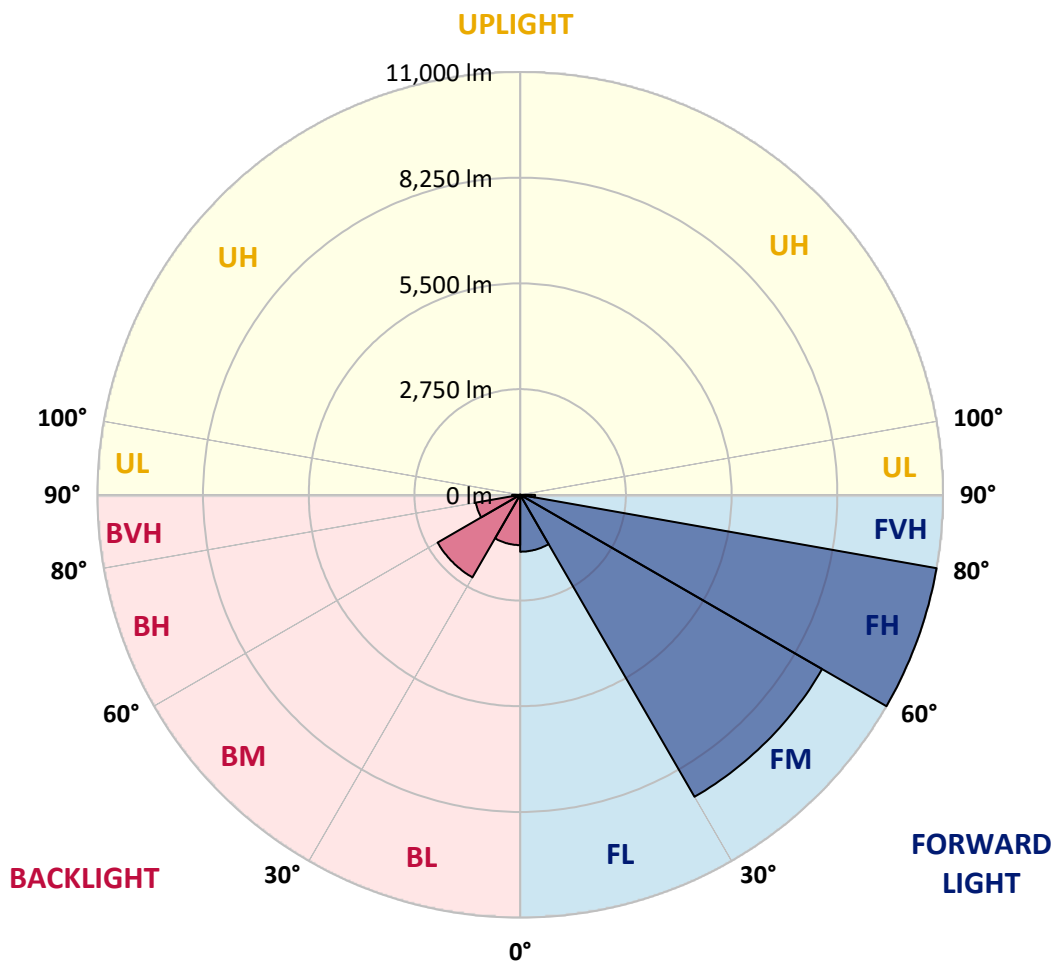
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1481.0	5.5			
FM	(30°-60°)	9070.2	33.5			
FH	(60°-80°)	11000.1	40.6			G4/12000
FVH	(80°-90°)	385.8	1.4			G3/500
BL	(0°-30°)	1308.3	4.8	B3/2500		
BM	(30°-60°)	2481.1	9.2	B2/2500		
BH	(60°-80°)	1169.7	4.3	B3/2500		G3/2500
BVH	(80°-90°)	211.1	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3
2.5°	3929.9	3937.7	3928.6	3940.3	3959.8	3980.7	3995.0	4015.8	4039.2	4071.8	4079.6
5°	3745.0	3756.8	3756.8	3777.6	3815.3	3849.2	3880.5	3914.3	3963.7	4019.7	4041.9
7.5°	3542.0	3548.5	3560.2	3591.5	3646.1	3694.3	3738.6	3793.2	3860.9	3935.1	3974.2
10°	3297.3	3306.4	3324.6	3368.9	3443.0	3509.4	3573.3	3648.8	3734.7	3827.1	3876.6
12.5°	3124.1	3121.5	3129.3	3161.8	3227.0	3307.7	3400.1	3496.4	3601.9	3709.9	3769.8
15°	3065.6	3051.3	3021.3	3013.5	3048.6	3129.3	3236.1	3354.6	3480.8	3611.0	3685.2
17.5°	3102.0	3077.2	2995.3	2935.4	2930.1	2991.3	3104.7	3237.4	3383.2	3542.0	3634.4
20°	3331.1	3272.5	3070.8	2931.5	2883.3	2913.3	3012.2	3152.7	3324.6	3535.5	3654.0
22.5°	3879.1	3793.2	3365.0	3105.9	2943.2	2906.7	2981.0	3130.6	3331.1	3616.2	3767.2
25°	4677.1	4554.7	3870.0	3540.6	3204.8	3010.9	3027.8	3181.4	3423.5	3803.6	3985.8
27.5°	5307.2	5227.7	4530.0	4153.8	3681.3	3292.1	3180.1	3308.9	3612.2	4110.8	4297.0
30°	5682.0	5633.9	5235.6	4848.9	4289.1	3739.8	3471.7	3548.5	3907.8	4536.5	4690.1
32.5°	6116.8	6088.2	5892.9	5537.5	4945.3	4328.2	3933.8	3906.4	4303.5	5048.1	5118.3
35°	6567.2	6558.0	6443.6	6188.3	5649.5	5104.0	4546.9	4362.1	4734.3	5579.2	5534.9
37.5°	6986.3	6970.7	6904.3	6756.0	6386.3	5937.2	5171.7	4829.4	5199.0	6086.9	5890.3
40°	7758.3	7635.9	7408.1	7296.2	7130.9	6638.7	5667.7	5265.4	5680.8	6571.1	6197.5
42.5°	8699.4	8500.2	8075.9	7922.2	7898.8	7192.1	6006.2	5688.5	6166.2	7051.4	6499.5
45°	9440.1	9252.7	8886.9	8692.9	8778.9	7693.2	6345.9	6140.3	6666.2	7555.2	6810.6
47.5°	10230.2	9936.0	9451.8	9510.4	9697.9	8167.0	6692.1	6625.8	7214.2	8118.9	7197.2
50°	10258.9	10033.7	9821.5	10171.7	10463.3	8603.1	7125.7	7134.8	7884.5	8828.3	7711.4
52.5°	9664.0	9615.8	9953.0	10503.6	10924.1	8948.1	7618.9	7660.7	8742.3	9643.2	8276.4
55°	9455.7	9401.0	9790.3	10387.8	10986.5	9233.2	8153.9	8229.5	9779.8	10502.3	8826.9
57.5°	9963.3	9842.3	9868.4	10333.0	10834.3	9545.6	8737.1	8889.4	10907.1	11253.4	9181.1
60°	11382.3	11123.3	10631.1	10619.5	10916.2	10014.2	9411.5	9597.6	12078.7	11612.6	9043.1
62.5°	13372.6	13113.5	12191.9	11591.9	11547.6	10787.4	10239.3	10288.8	12755.6	11125.8	8200.9
65°	15527.0	15295.3	14265.6	13418.1	13009.4	12068.3	11201.3	10597.4	12534.3	9786.4	6727.3
67.5°	18142.1	17893.5	17008.3	16225.9	15832.8	14135.4	11876.9	10301.8	11129.7	7581.2	4835.9
70°	19971.1	19717.2	19368.3	20002.3	20964.3	17117.6	11964.1	9100.4	8312.8	5039.0	2910.6
72.5°	17584.9	17466.5	18103.1	20772.9	24779.6	18927.0	10814.7	6625.8	4828.1	2675.0	1684.4
73°	16111.4	16085.4	17171.0	20232.6	24807.0	18648.5	10310.9	6158.5	4140.8	2366.5	1540.0
75°	7275.3	7484.9	9864.4	15454.0	21552.7	15366.9	7257.1	3532.9	2339.2	1635.0	1162.5
77.5°	1748.2	1821.2	3086.3	7339.2	13610.8	9157.7	3288.2	1746.9	1495.7	1154.6	848.7
80°	744.6	769.4	1188.5	2711.5	6408.4	3687.7	1515.2	1170.3	1034.9	805.8	594.8
82.5°	414.0	440.0	674.3	1230.1	2586.5	1257.5	924.2	814.9	680.8	485.5	386.6
85°	234.4	248.7	394.4	687.3	1096.1	505.0	553.2	541.6	384.0	249.9	190.1
87.5°	110.7	119.8	190.1	319.0	429.5	197.8	281.2	309.9	240.8	152.3	98.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3	4091.3
2.5°	4088.7	4112.2	4139.5	4153.8	4166.8	4182.4	4198.1	4198.1	4200.6	4202.0
5°	4060.1	4108.3	4151.2	4169.4	4173.3	4173.3	4169.4	4148.6	4130.4	4138.1
7.5°	4000.1	4070.5	4106.9	4100.4	4051.0	3993.7	3945.5	3886.9	3857.0	3851.8
10°	3914.3	3995.0	4001.5	3936.4	3814.1	3691.7	3590.1	3491.2	3444.4	3432.6
12.5°	3819.3	3893.5	3851.8	3717.7	3521.2	3342.8	3213.9	3113.8	3069.5	3057.7
15°	3742.5	3793.2	3687.7	3476.9	3229.6	3040.8	2934.1	2859.9	2828.7	2819.6
17.5°	3702.1	3712.5	3519.9	3234.8	2971.9	2814.3	2748.0	2712.8	2701.1	2694.6
20°	3721.6	3648.8	3359.8	3009.6	2760.9	2650.3	2634.7	2625.6	2622.9	2619.1
22.5°	3819.3	3629.2	3212.7	2796.1	2576.1	2527.9	2541.0	2539.7	2537.0	2534.5
25°	3993.7	3646.1	3069.5	2593.1	2421.2	2410.8	2434.2	2434.2	2423.8	2423.8
27.5°	4224.1	3681.3	2909.4	2400.4	2280.7	2281.9	2300.1	2294.9	2283.2	2275.5
30°	4505.3	3703.4	2721.9	2227.3	2149.1	2143.9	2149.1	2127.0	2091.8	2089.3
32.5°	4792.9	3676.1	2504.5	2073.6	2009.9	1998.1	1994.2	1963.0	1922.6	1911.0
35°	5053.3	3575.8	2283.2	1951.3	1877.1	1851.0	1869.2	1858.9	1822.4	1813.3
37.5°	5243.3	3389.6	2084.1	1843.3	1782.1	1775.5	1787.3	1791.2	1748.2	1739.1
40°	5370.9	3137.2	1913.5	1752.1	1763.9	1739.1	1700.0	1672.7	1659.7	1655.7
42.5°	5473.7	2874.2	1770.3	1709.1	1767.8	1696.2	1611.6	1567.3	1590.7	1601.1
45°	5592.2	2617.7	1650.6	1655.7	1748.2	1646.6	1550.4	1507.4	1516.5	1519.1
47.5°	5754.9	2305.3	1521.7	1569.9	1683.2	1612.8	1512.6	1451.5	1408.5	1389.0
50°	5980.1	1935.6	1387.6	1473.6	1619.3	1588.1	1454.0	1389.0	1309.6	1291.3
52.5°	6136.3	1590.7	1276.9	1392.8	1562.0	1538.6	1407.2	1322.6	1239.2	1223.7
55°	6051.7	1321.2	1180.7	1303.0	1486.6	1477.4	1368.1	1254.9	1189.8	1176.8
57.5°	5628.7	1150.7	1106.4	1218.4	1394.2	1425.4	1316.0	1197.6	1150.7	1141.6
60°	4821.6	1044.0	1059.6	1161.2	1318.7	1373.3	1264.0	1166.4	1135.1	1128.6
62.5°	3741.1	972.4	1024.5	1119.5	1260.1	1336.9	1235.3	1162.5	1150.7	1142.9
65°	2680.2	915.1	986.7	1077.8	1206.7	1303.0	1224.9	1157.3	1159.8	1153.4
67.5°	1821.2	864.4	941.1	1030.9	1154.6	1273.1	1210.6	1139.1	1171.6	1163.7
70°	1274.4	814.9	887.8	971.1	1089.5	1231.4	1184.6	1111.6	1109.1	1077.8
72.5°	994.5	749.8	814.9	887.8	1006.3	1172.8	1132.5	1050.5	1007.5	975.0
73°	949.0	734.2	796.7	869.5	988.0	1158.5	1118.2	1033.6	985.4	955.4
75°	784.9	666.5	723.7	788.8	909.9	1090.9	1047.9	956.8	895.6	877.4
77.5°	617.0	570.2	624.8	683.4	801.9	992.0	943.8	856.5	822.7	807.1
80°	457.0	472.5	520.7	572.8	695.1	886.5	843.5	756.3	907.3	869.5
82.5°	321.5	357.9	402.2	449.1	583.2	783.7	731.6	641.8	663.9	551.9
85°	190.1	234.4	276.0	316.3	420.4	649.6	604.0	511.6	419.2	399.7
87.5°	110.7	130.2	141.9	183.5	289.0	489.5	425.6	378.8	217.4	147.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)