

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: P298942

Luminaire Tested: **GLNA-AF-05-LED-E1-T2-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298942
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-05-LED-E1-T2-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23505 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B3 - U0 - G3

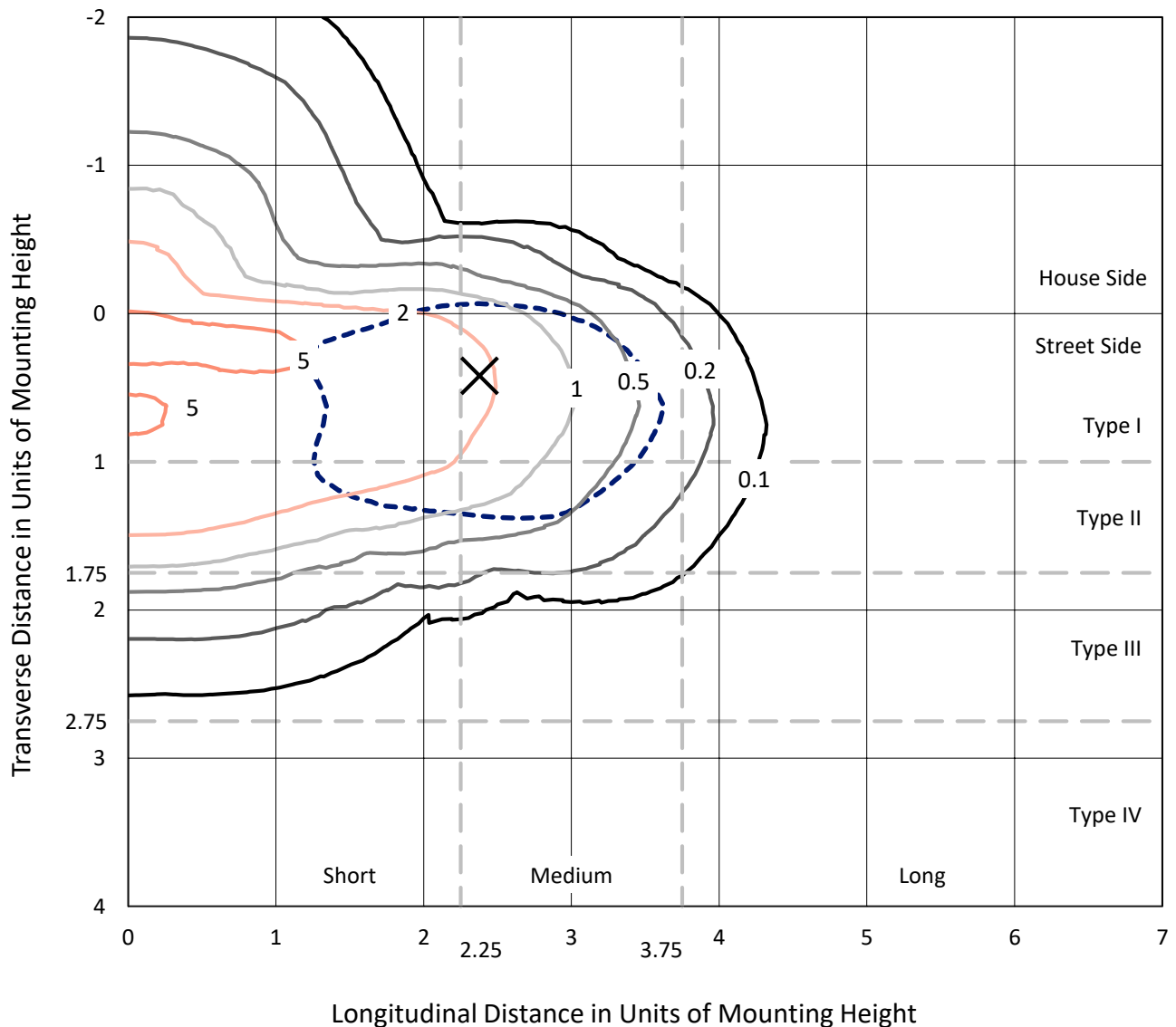
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

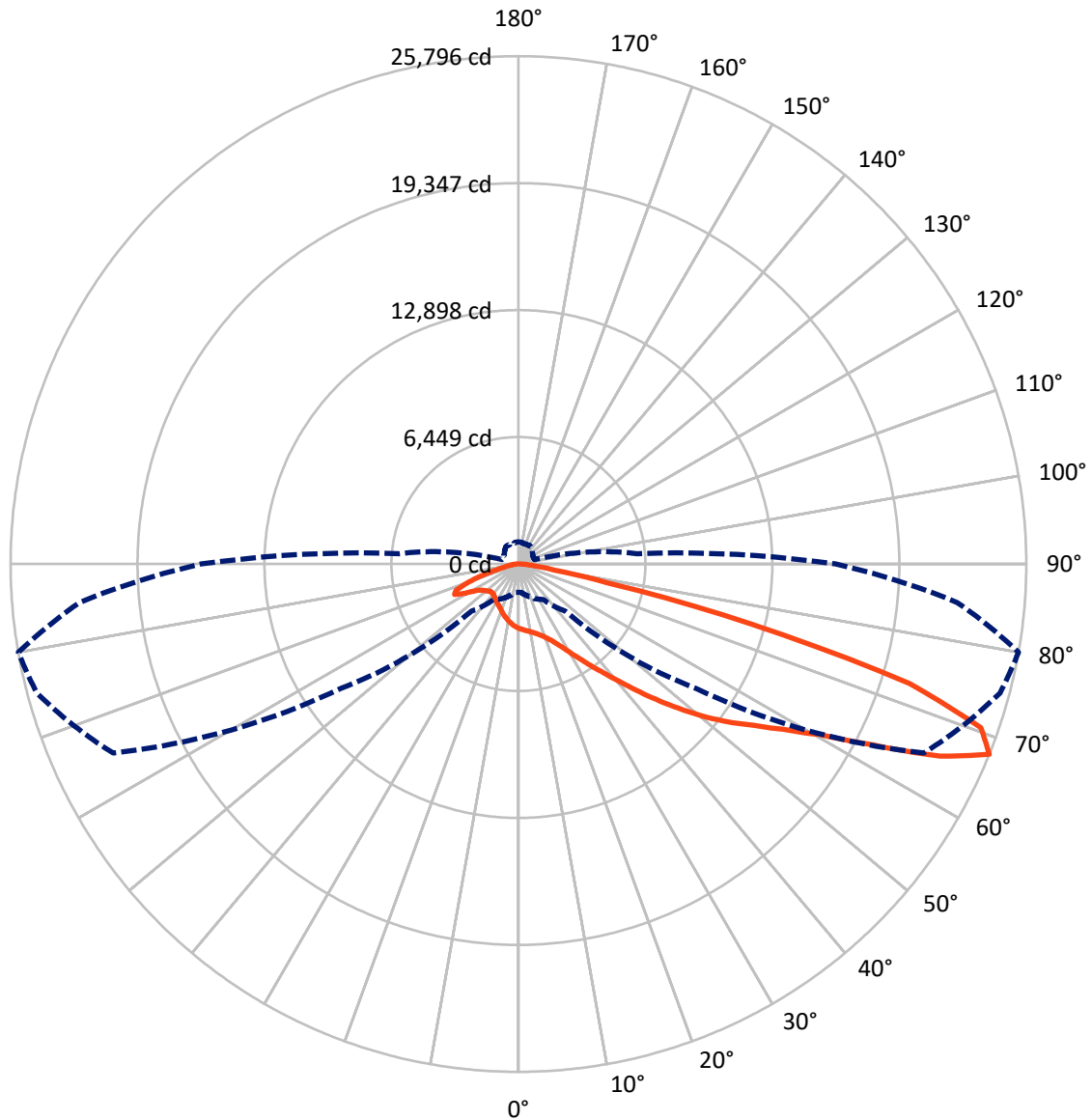
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	4328.7	0.0	4328.7
	% Fixture	18.4	0.0	18.4
Street Side	Lumens	19176.3	0.0	19176.3
	% Fixture	81.6	0.0	81.6
Total	Lumens	23505.0	0.0	23505.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.2	1.3
10°-20°	867.8	3.7
20°-30°	1436.3	6.1
30°-40°	2349.5	10.0
40°-50°	3793.4	16.1
50°-60°	5476.6	23.3
60°-70°	6043.8	25.7
70°-80°	2785.8	11.9
80°-90°	450.6	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°	23505.0	100.0
0°-180°	23505.0	100.0



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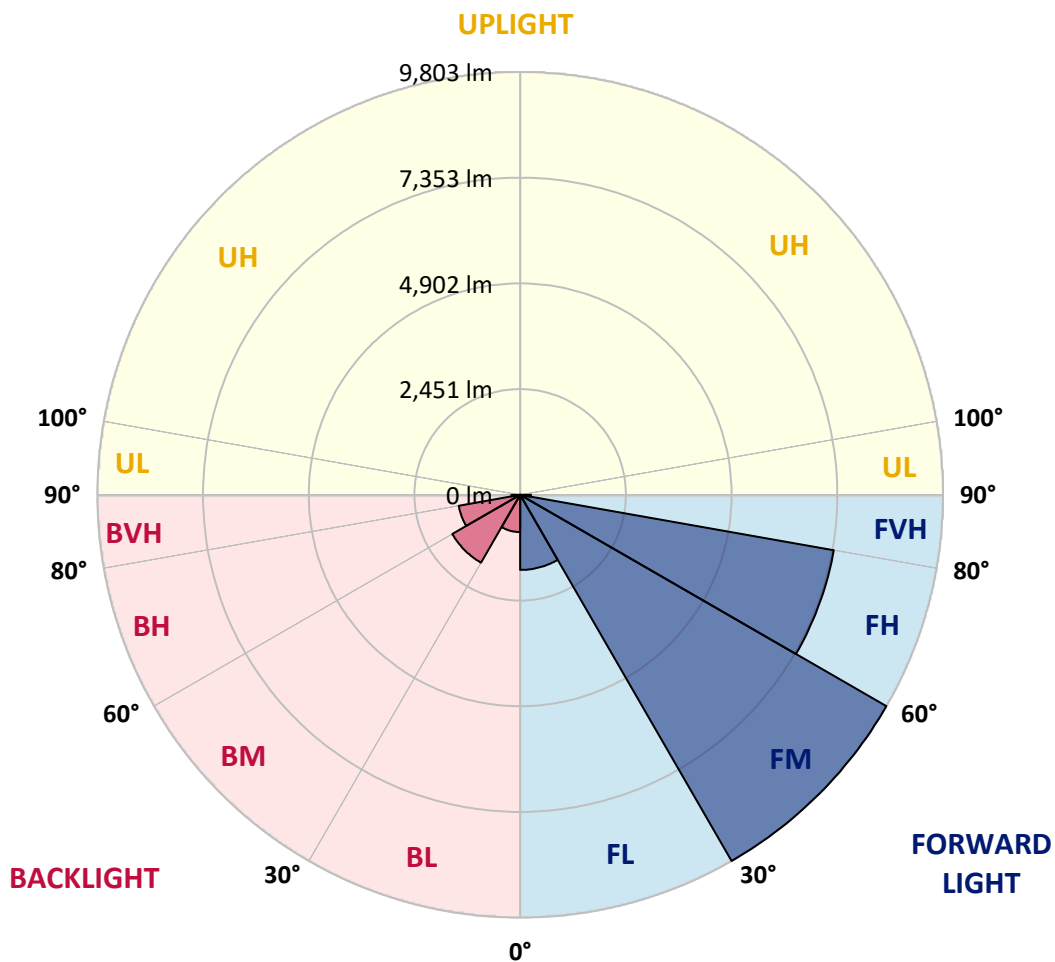
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1741.7	7.4			
FM (30°-60°)	9803.3	41.7			
FH (60°-80°)	7383.5	31.4			G3/7500
FVH (80°-90°)	247.7	1.1			G3/500
BL (0°-30°)	863.6	3.7	B2/1000		
BM (30°-60°)	1816.2	7.7	B2/2500		
BH (60°-80°)	1446.0	6.2	B3/2500		G3/2500
BVH (80°-90°)	202.9	0.9			G2/225
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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5
2.5°	3572.2	3551.3	3554.8	3549.0	3531.7	3501.6	3469.2	3410.2	3348.8	3316.4	3291.0
5°	3870.7	3864.9	3856.8	3838.3	3794.4	3731.9	3654.3	3550.2	3437.9	3378.9	3322.2
7.5°	4094.1	4090.6	4080.2	4068.6	4025.8	3950.6	3833.7	3685.6	3522.4	3441.4	3353.5
10°	4112.6	4118.4	4126.5	4157.7	4163.5	4123.0	4003.8	3824.4	3610.4	3506.2	3394.0
12.5°	3955.2	3967.9	3999.2	4079.0	4163.5	4213.2	4151.9	3970.2	3713.4	3587.2	3444.9
15°	3746.9	3753.9	3792.0	3902.0	4053.6	4207.5	4265.3	4131.1	3846.4	3691.4	3521.3
17.5°	3657.8	3661.3	3687.9	3760.8	3902.0	4121.8	4329.0	4305.8	4009.6	3821.0	3615.0
20°	3612.7	3620.8	3659.0	3730.7	3819.8	4011.9	4338.2	4494.4	4204.0	3983.0	3733.0
22.5°	3741.1	3737.7	3751.5	3787.4	3862.6	3978.3	4331.3	4688.8	4451.6	4191.3	3886.9
25°	4040.8	4053.6	4029.3	3988.8	4013.1	4094.1	4368.3	4899.4	4761.7	4458.6	4088.3
27.5°	4467.8	4455.1	4419.2	4324.3	4274.6	4309.3	4491.0	5126.3	5147.1	4810.3	4354.4
30°	4893.7	4883.2	4848.5	4732.8	4631.0	4602.1	4729.3	5386.6	5606.5	5232.7	4680.7
32.5°	5335.7	5324.1	5291.7	5176.0	5053.4	4986.2	5068.4	5687.5	6148.0	5737.2	5064.9
35°	5880.7	5858.7	5790.5	5629.6	5509.3	5457.2	5495.4	6065.9	6772.9	6334.3	5531.3
37.5°	6393.4	6426.9	6357.5	6135.3	5979.1	5960.6	6003.4	6527.6	7446.4	7002.0	6067.0
40°	6908.3	6914.1	6851.6	6669.9	6509.1	6479.0	6586.6	7087.7	8241.3	7800.5	6718.5
42.5°	7440.6	7452.2	7346.9	7179.1	7061.0	7066.8	7189.5	7743.8	9153.2	8741.2	7468.4
45°	8071.2	8088.6	7972.9	7753.0	7645.4	7861.8	7810.9	8479.7	10153.0	9810.5	8329.3
47.5°	8730.8	8757.4	8669.5	8463.5	8329.3	8626.7	8432.3	9295.5	11229.2	10957.2	9274.7
50°	9090.7	9128.9	9214.5	9199.5	9170.6	9120.8	9125.4	10170.3	12338.9	12151.4	10246.7
52.5°	8897.5	8896.3	9208.7	9588.3	9993.3	10023.4	9970.2	11092.6	13375.7	13319.0	11162.0
55°	8013.4	8073.6	8546.8	9281.6	10387.9	11078.7	11236.1	12149.1	14394.0	14460.0	12091.2
57.5°	6541.5	6591.2	7230.0	8254.1	9855.6	11705.9	13036.7	13684.7	15532.7	15840.5	13328.3
60°	4436.6	4496.8	5173.7	6403.8	8423.0	11356.4	14750.4	16424.8	16895.8	17595.9	15064.0
62.5°	2607.1	2661.5	3213.5	4039.7	5930.5	9732.9	15502.6	20323.3	19060.9	20244.7	17711.6
65°	1794.8	1831.8	2100.3	2514.5	3407.9	6555.4	14569.9	23014.9	22392.4	23526.4	20781.6
67.5°	1444.1	1439.5	1652.4	1934.8	2194.0	3380.1	11017.4	22710.6	25322.3	25795.6	22375.0
70°	1189.6	1184.9	1329.6	1563.3	1753.1	1903.5	6001.1	19165.0	24725.2	24917.3	20907.7
72.5°	995.2	999.8	1092.4	1265.9	1438.4	1433.7	2637.2	13482.2	19450.8	20779.3	16666.7
75°	840.1	842.4	903.7	1026.4	1167.6	1154.9	1430.3	7304.0	11306.7	12231.3	9238.8
77.5°	715.1	717.4	756.8	825.1	925.7	921.1	1043.8	3155.6	4716.6	4658.8	3160.2
80°	637.6	637.6	656.1	668.8	724.4	703.6	774.1	1515.9	1993.8	1841.1	1261.3
82.5°	499.9	502.2	615.6	611.0	570.5	543.9	543.9	893.3	1056.5	976.6	738.3
85°	281.2	280.0	396.9	479.1	502.2	383.0	379.6	499.9	575.1	506.8	357.6
87.5°	120.3	122.7	184.0	212.9	284.7	238.4	234.9	258.0	292.8	253.4	165.5
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°	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5	3265.5
2.5°	3266.7	3236.6	3170.6	3088.5	3014.4	2965.8	2921.8	2858.2	2861.7	2817.7	2785.3
5°	3264.4	3201.9	3049.1	2867.5	2692.7	2566.6	2471.7	2386.1	2365.3	2324.8	2300.4
7.5°	3266.7	3164.9	2908.0	2617.5	2401.1	2241.4	2160.4	2115.3	2104.9	2091.0	2092.2
10°	3274.8	3131.3	2752.9	2383.8	2157.0	2051.7	2032.0	2045.9	2062.1	2066.7	2067.9
12.5°	3293.3	3101.2	2582.8	2175.5	2004.2	1971.8	2005.4	2052.8	2084.1	2099.1	2097.9
15°	3335.0	3078.1	2419.6	2012.3	1919.7	1937.1	1999.6	2066.7	2111.8	2132.7	2133.8
17.5°	3380.1	3044.5	2251.8	1887.3	1857.3	1901.2	1978.8	2057.4	2113.0	2136.1	2140.8
20°	3439.1	3002.9	2076.0	1793.6	1798.2	1848.0	1920.9	1999.6	2060.9	2080.6	2089.8
22.5°	3516.6	2957.7	1922.1	1717.2	1731.1	1769.3	1826.0	1894.3	1947.5	1956.8	1964.9
25°	3620.8	2909.1	1799.4	1647.8	1653.6	1675.6	1713.8	1754.3	1791.3	1780.9	1789.0
27.5°	3760.8	2867.5	1708.0	1584.2	1573.7	1578.4	1598.0	1610.8	1630.4	1601.5	1605.0
30°	3925.1	2822.3	1637.4	1528.6	1499.7	1491.6	1496.2	1503.2	1518.2	1478.9	1473.1
32.5°	4116.0	2767.9	1571.4	1480.0	1439.5	1423.3	1425.6	1444.1	1502.0	1477.7	1465.0
35°	4338.2	2706.6	1502.0	1426.8	1399.0	1375.9	1373.6	1431.4	1603.8	1588.8	1577.2
37.5°	4598.6	2645.3	1432.6	1366.6	1368.9	1343.5	1335.4	1401.3	1623.5	1564.5	1556.4
40°	4929.5	2612.9	1373.6	1303.0	1331.9	1328.4	1312.2	1345.8	1493.9	1386.3	1372.4
42.5°	5339.2	2617.5	1329.6	1234.7	1287.9	1325.0	1299.5	1300.7	1353.9	1272.9	1260.2
45°	5844.9	2671.9	1298.3	1180.3	1238.2	1321.5	1294.9	1276.4	1281.0	1238.2	1231.2
47.5°	6435.0	2784.1	1276.4	1135.2	1190.7	1308.8	1293.7	1269.4	1259.0	1235.9	1230.1
50°	7091.1	2947.3	1260.2	1092.4	1147.9	1287.9	1294.9	1262.5	1250.9	1241.6	1238.2
52.5°	7735.7	3133.6	1235.9	1055.3	1114.4	1262.5	1298.3	1255.5	1242.8	1235.9	1232.4
55°	8454.3	3366.2	1198.8	1024.1	1086.6	1230.1	1298.3	1245.1	1231.2	1232.4	1231.2
57.5°	9425.1	3742.3	1154.9	997.5	1053.0	1190.7	1276.4	1233.5	1216.2	1217.3	1218.5
60°	10942.2	4405.3	1101.6	970.9	1011.4	1144.4	1246.3	1208.1	1190.7	1195.4	1196.5
62.5°	13173.2	5378.5	1032.2	931.5	967.4	1094.7	1204.6	1175.7	1158.3	1169.9	1169.9
65°	15492.2	6237.1	946.6	881.8	921.1	1040.3	1152.5	1135.2	1117.8	1144.4	1143.3
67.5°	16115.9	6045.0	860.9	827.4	874.8	980.1	1090.1	1080.8	1071.5	1117.8	1115.5
70°	14316.5	4853.2	782.2	771.8	823.9	915.3	1022.9	1022.9	1017.2	1051.9	1043.8
72.5°	10907.5	3441.4	707.0	712.8	766.0	844.7	950.0	958.1	948.9	966.2	959.3
75°	5839.1	1969.5	631.8	648.0	694.3	773.0	869.0	877.1	871.3	870.2	873.7
77.5°	1940.6	962.8	553.1	578.6	619.1	698.9	784.6	797.3	783.4	781.1	779.9
80°	864.4	605.2	466.3	499.9	535.8	614.5	695.5	705.9	690.8	711.7	685.0
82.5°	555.4	398.1	373.8	410.8	445.5	530.0	606.4	608.7	594.8	690.8	589.0
85°	269.6	246.5	281.2	314.7	344.8	416.6	502.2	503.4	468.7	427.0	412.0
87.5°	134.2	143.5	187.5	217.5	232.6	285.8	365.7	358.7	343.7	312.4	288.1
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)