

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: P651608

Luminaire Tested: **GALN-SA9D-840-U-AFL-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-28)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-AFL-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53220.2 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G3

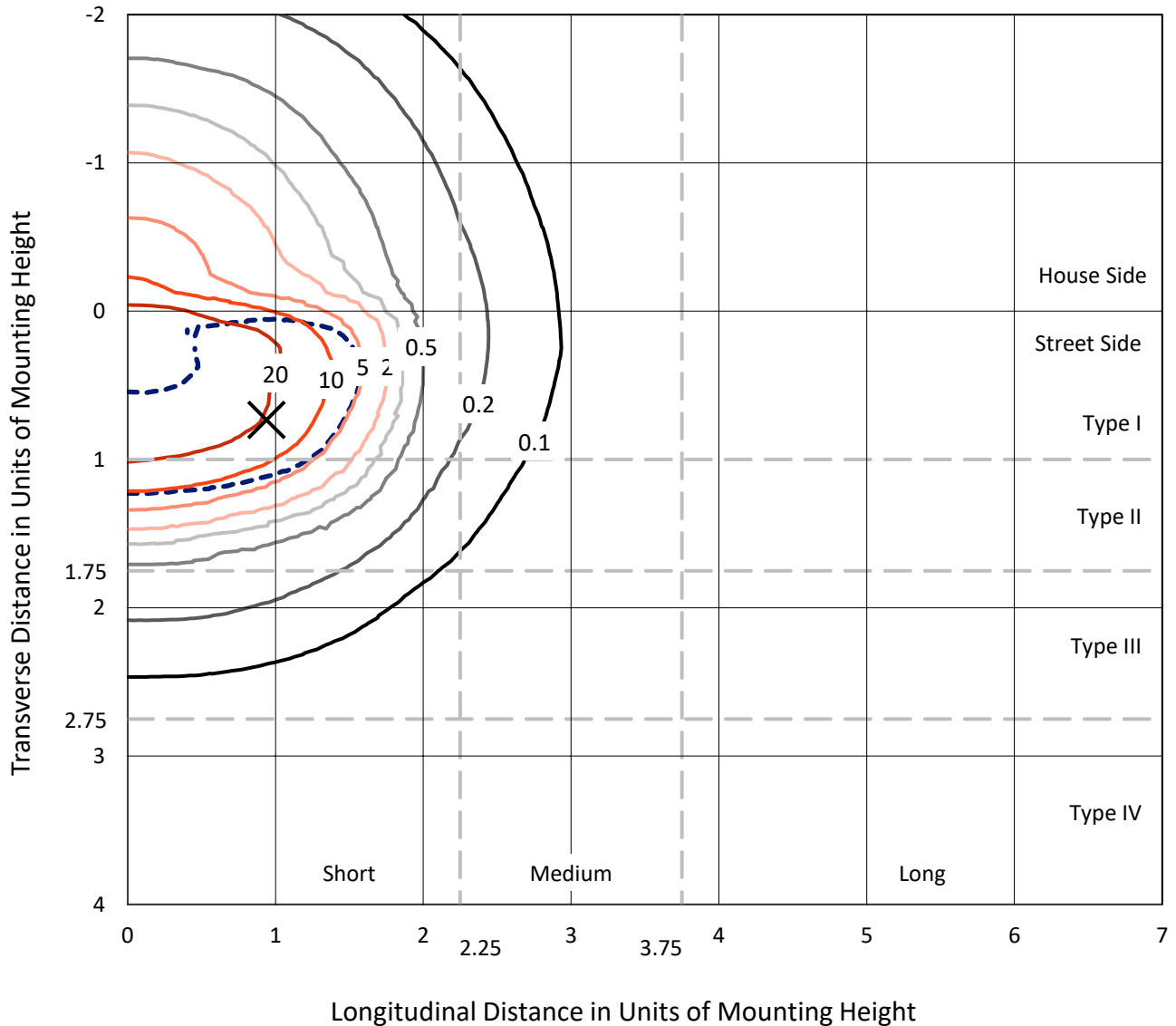
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

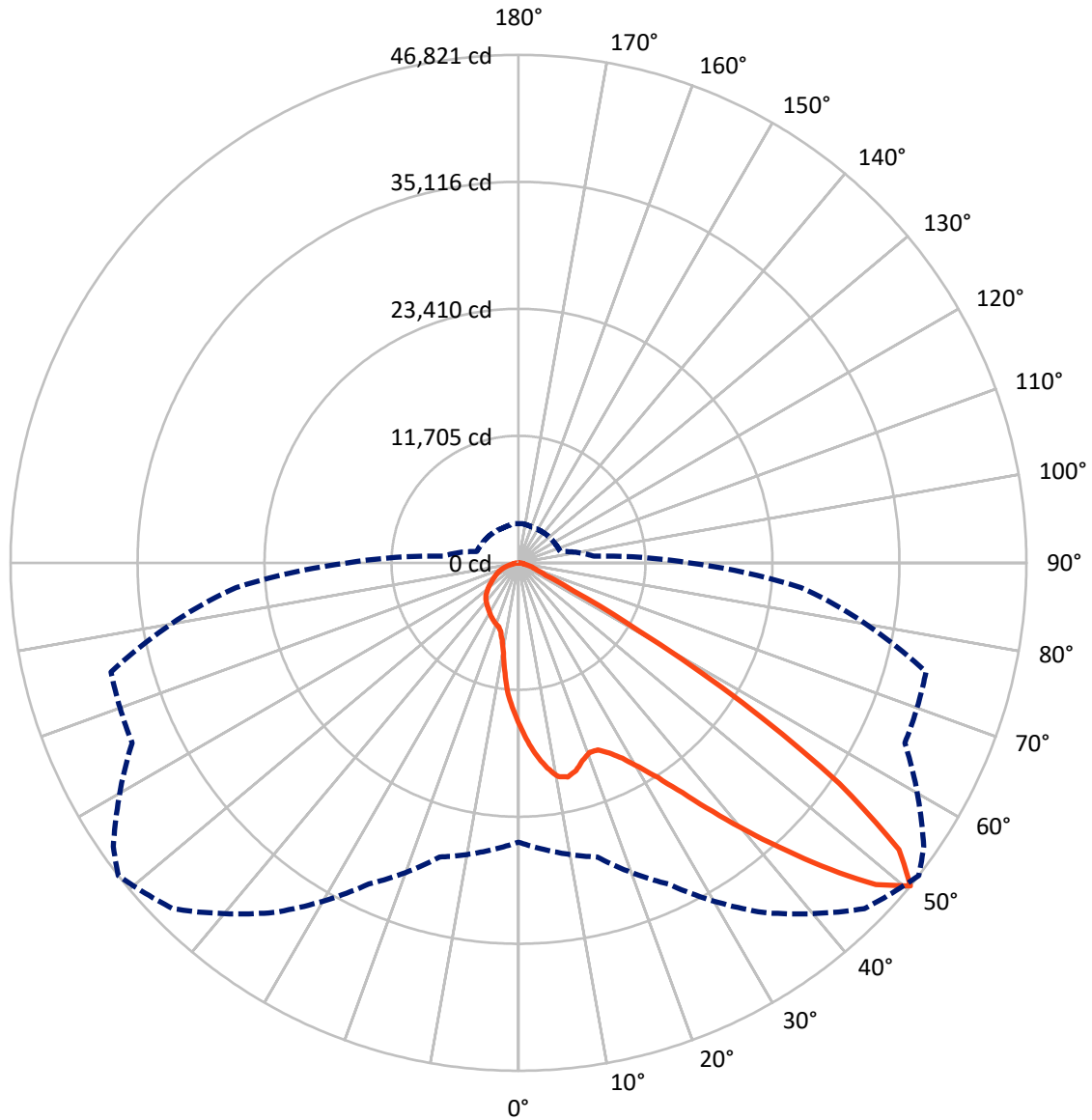
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 30.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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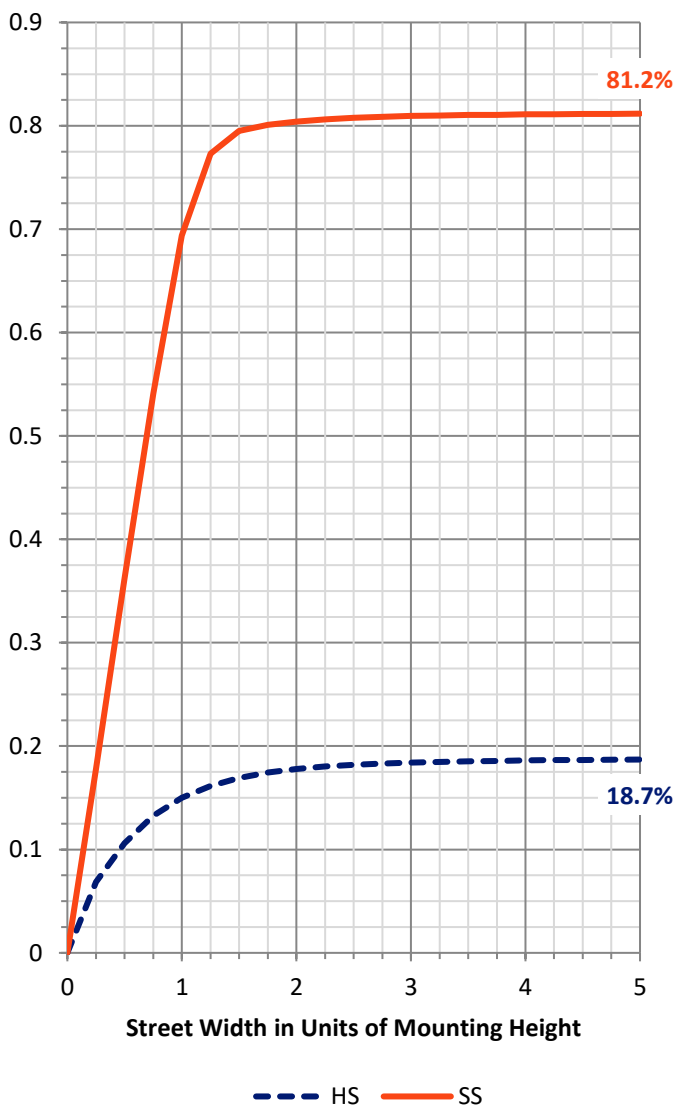
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10004.1	0.0	10004.1
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	43216.0	0.0	43216.0
	% Fixture	81.2	0.0	81.2
Total	Lumens	53220.2	0.0	53220.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1382.7	2.6
10°-20°	3706.0	7.0
20°-30°	6242.7	11.7
30°-40°	10475.7	19.7
40°-50°	16025.3	30.1
50°-60°	11683.7	22.0
60°-70°	2600.2	4.9
70°-80°	937.9	1.8
80°-90°	166.0	0.3
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°	53220.2	100.0
0°-180°	53220.2	100.0

Coefficient of Utilization



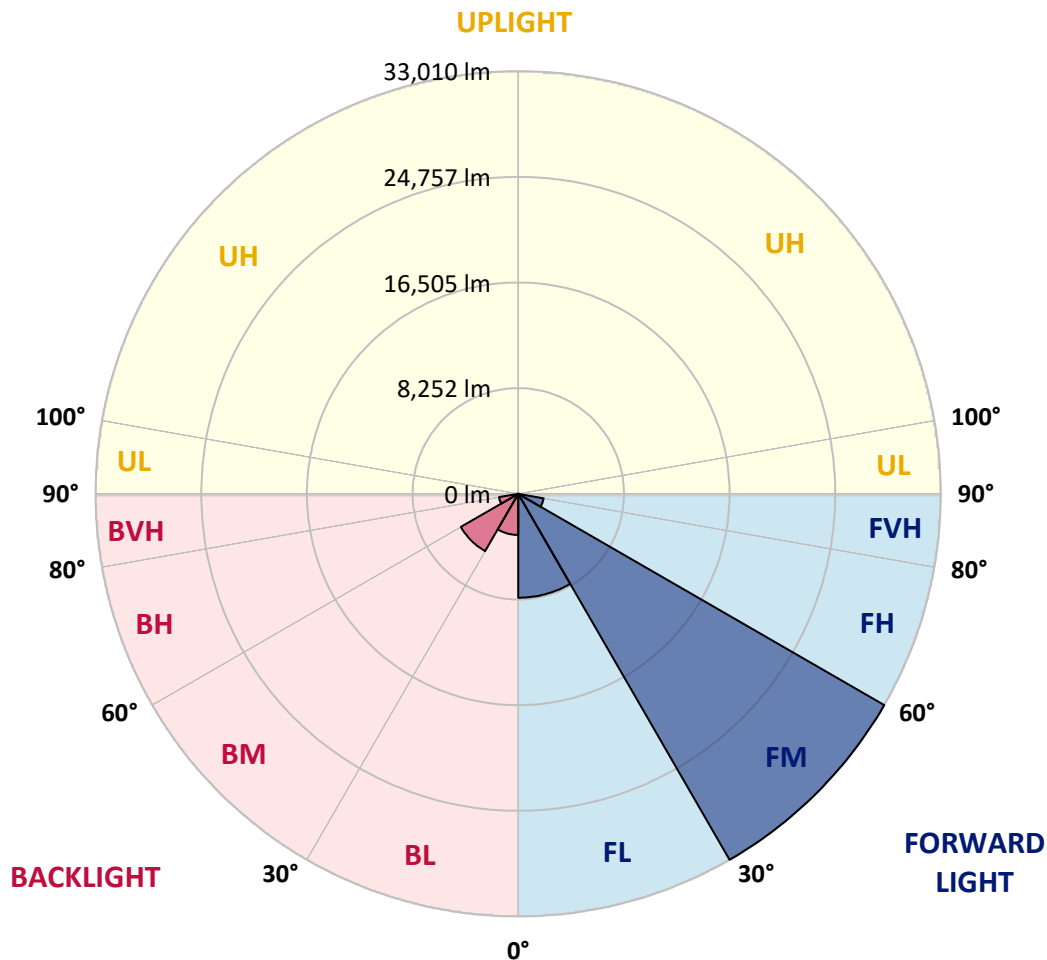
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8117.9	15.3			
FM (30°-60°)	33009.9	62.0			
FH (60°-80°)	2013.9	3.8			G2/5000
FVH (80°-90°)	74.4	0.1			G1/100
BL (0°-30°)	3213.5	6.0	B4/5000		
BM (30°-60°)	5174.8	9.7	B4/8500		
BH (60°-80°)	1524.2	2.9	B3/2500		G3/2500
BVH (80°-90°)	91.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8
2.5°	17663.6	17323.7	17362.2	17118.5	16855.5	16778.5	16509.2	16252.6	16060.2	15649.7	15271.3
5°	19305.6	19202.9	19049.0	18856.6	18657.8	18170.3	17894.5	17573.8	16868.3	16233.3	15604.8
7.5°	19542.8	19523.6	19607.0	19607.0	19677.5	19491.5	19100.3	18875.8	18125.4	17092.8	15925.4
10°	17875.3	17933.0	18337.1	18863.0	19594.1	20100.8	20036.7	19979.0	19158.1	17747.0	16303.9
12.5°	16547.6	16419.3	16656.7	17105.6	18202.4	19427.4	20254.8	20261.2	20049.5	18792.4	16579.6
15°	15797.2	15887.0	15951.2	16162.8	16990.1	18407.6	19863.6	20293.2	21223.3	19530.0	17015.8
17.5°	16278.2	15976.8	15963.9	16015.2	16438.6	17503.2	19138.8	19876.4	21864.7	20479.3	17554.6
20°	16906.8	16900.4	16720.8	16656.7	16650.2	17599.4	18664.1	19664.7	22204.6	21710.8	18099.7
22.5°	18009.9	18009.9	17714.9	17573.8	17272.4	18048.4	18728.3	19408.2	22769.0	22557.3	18362.7
25°	19857.1	19555.7	19049.0	18702.7	18529.5	18805.3	19408.2	20017.5	23262.8	23455.2	18907.9
27.5°	21563.2	21088.6	20838.5	20241.9	20011.1	19850.7	20402.3	21018.0	23840.1	24853.5	19202.9
30°	23500.1	23416.8	22967.8	22198.2	21627.3	21332.3	21839.0	22448.3	24898.4	26283.8	19882.8
32.5°	26963.6	26206.8	25597.5	24654.7	23724.6	23096.1	23596.4	24000.5	26655.7	27778.1	20626.8
35°	30702.9	30459.2	29407.2	27707.6	26283.8	25719.4	26014.4	26315.8	28701.7	30061.5	21877.4
37.5°	34378.0	34044.4	33178.6	31748.3	30016.6	28868.5	29080.2	29432.9	30997.9	33140.1	23403.9
40°	37020.5	36610.0	36173.8	35962.2	34243.2	32671.9	32550.1	32639.8	34102.2	36026.3	25097.2
42.5°	37212.9	37719.6	37854.3	38707.3	38303.3	37014.0	36263.7	36282.8	37065.4	38880.4	26809.7
45°	36808.8	36340.6	37334.8	39662.9	40997.0	41599.9	40336.4	40176.1	38899.7	40535.2	27662.8
47.5°	32569.3	32697.6	34378.0	38059.5	41914.2	44608.0	44313.0	43780.6	39881.0	40477.5	27528.0
50°	25745.0	26521.1	28079.6	32665.4	39348.7	45082.6	46820.7	45589.3	39297.3	38886.9	26155.5
52.5°	17144.1	17464.8	18491.0	24411.0	31639.3	40297.9	43934.5	44216.8	38758.6	36802.4	24417.3
55°	7632.4	7606.8	9049.8	12750.7	19850.7	30664.4	35898.1	37616.9	36686.9	34679.4	22724.1
57.5°	3232.6	3341.6	3931.7	5509.5	9761.8	18503.9	24321.1	25828.4	28214.3	28477.3	17432.8
60°	2187.1	2200.0	2360.3	2758.0	4085.6	8690.7	12757.0	14565.8	16271.8	16156.4	9248.7
62.5°	1718.9	1763.8	1885.7	2046.0	2424.4	3944.5	5708.3	6715.2	6824.3	5740.3	3508.3
65°	1468.7	1475.2	1597.1	1731.7	1898.5	2296.2	2751.5	2802.8	2834.9	2732.2	2578.3
67.5°	1212.2	1225.0	1321.2	1475.2	1629.1	1757.4	1885.7	1949.8	2097.3	2385.9	2347.5
70°	962.1	981.3	1064.7	1193.0	1334.1	1411.0	1571.4	1629.1	1763.8	1988.3	2078.1
72.5°	731.2	737.6	808.1	897.9	1026.2	1103.1	1237.9	1302.0	1391.8	1584.2	1667.6
75°	526.0	545.1	596.5	641.3	660.6	711.9	840.2	910.7	1039.1	1122.4	1128.8
77.5°	275.8	288.6	301.4	301.4	365.6	461.8	545.1	583.7	673.5	737.6	705.5
80°	109.0	115.5	147.5	198.8	256.6	333.5	391.2	410.5	487.4	526.0	545.1
82.5°	64.2	70.6	96.2	141.1	186.0	237.3	282.2	301.4	352.8	397.6	410.5
85°	32.0	38.5	57.7	89.8	121.9	147.5	141.1	134.7	134.7	128.3	134.7
87.5°	12.9	12.9	19.3	19.3	19.3	25.7	32.0	32.0	32.0	38.5	38.5
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°	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8	15001.8
2.5°	15021.1	14764.6	14527.3	14091.1	13616.5	13481.8	12930.2	12731.4	12590.3	12423.5	12372.2
5°	15098.1	14758.1	13994.9	13116.2	12417.1	11519.2	10929.1	10294.2	9832.4	9716.9	9684.9
7.5°	15258.4	14674.8	13360.0	12032.3	10602.0	9383.4	8453.4	7953.1	7510.6	7484.9	7440.0
10°	15438.0	14424.7	12667.2	10582.8	8754.8	7626.0	7068.0	6849.9	6740.9	6715.2	6702.4
12.5°	15585.5	14373.4	11891.2	9171.8	7446.4	6766.6	6599.8	6580.6	6625.5	6638.3	6663.9
15°	15649.7	14168.1	10954.8	7908.2	6631.9	6381.8	6452.3	6529.3	6561.3	6644.7	6580.6
17.5°	15771.5	13905.1	9800.3	6907.6	6176.5	6221.4	6343.2	6433.1	6484.4	6542.1	6458.7
20°	15835.7	13667.8	8716.4	6311.2	6016.2	6099.5	6266.3	6336.9	6400.9	6426.7	6330.5
22.5°	15777.9	13180.3	7760.7	5830.1	5862.2	5971.3	6118.8	6195.7	6157.2	6054.6	5996.9
25°	15624.0	12494.1	6766.6	5522.3	5644.1	5836.5	5952.0	5894.3	5823.8	5766.0	5746.8
27.5°	15617.6	11653.9	6048.2	5240.1	5458.2	5721.1	5682.6	5631.3	5663.4	5618.5	5567.2
30°	15649.7	10839.3	5458.2	5079.7	5323.4	5451.7	5496.6	5445.3	5483.8	5400.4	5426.0
32.5°	15482.9	10044.0	5073.3	4893.7	5163.2	5156.7	5304.2	5342.7	5252.9	5079.7	5105.4
35°	15553.5	9402.6	4746.2	4810.4	4983.5	4983.5	5099.0	5054.1	4816.7	4714.1	4739.8
37.5°	16040.9	8774.1	4585.9	4694.9	4810.4	4861.7	4823.2	4630.8	4573.0	4573.0	4585.9
40°	16502.7	8235.3	4489.7	4669.2	4650.0	4682.1	4399.9	4419.1	4419.1	4425.5	4393.5
42.5°	16913.2	7869.7	4412.7	4515.3	4547.4	4380.6	4207.4	4188.2	4233.1	4226.7	4201.0
45°	17060.7	7568.3	4303.6	4342.2	4367.8	4092.0	4008.6	3970.1	4021.5	4040.7	4066.3
47.5°	16496.3	7318.1	4181.8	4104.8	4053.5	3873.9	3764.9	3694.3	3758.5	3867.5	3893.2
50°	15771.5	6991.1	3989.4	3841.9	3732.9	3655.8	3578.9	3508.3	3553.2	3630.2	3611.0
52.5°	14700.4	6478.0	3745.6	3591.7	3405.7	3425.0	3354.4	3315.9	3341.6	3341.6	3322.4
55°	13173.9	5323.4	3335.2	3226.2	3072.2	3123.6	3136.3	3085.0	3033.7	3078.6	3040.1
57.5°	8992.1	3758.5	2976.0	2976.0	2822.1	2892.6	2886.2	2764.4	2642.5	2655.3	2629.6
60°	5201.6	2995.2	2745.1	2719.5	2559.1	2616.9	2629.6	2546.3	2360.3	2373.1	2347.5
62.5°	2956.8	2559.1	2398.8	2360.3	2328.2	2379.5	2379.5	2270.4	2110.2	2122.9	2097.3
65°	2514.2	2373.1	2142.2	2135.8	2122.9	2135.8	2084.5	1969.0	1827.9	1770.2	1776.6
67.5°	2283.3	2193.5	1969.0	1911.3	1872.8	1866.4	1770.2	1661.1	1597.1	1545.8	1539.3
70°	2001.1	1930.5	1763.8	1686.8	1648.4	1558.5	1462.3	1391.8	1302.0	1276.4	1302.0
72.5°	1584.2	1577.8	1513.6	1430.3	1346.9	1276.4	1193.0	1096.7	1013.4	994.1	949.2
75°	1096.7	1109.6	1122.4	1109.6	1039.1	949.2	853.0	776.1	673.5	615.7	602.9
77.5°	718.4	737.6	756.8	731.2	686.3	602.9	538.7	442.5	365.6	320.7	314.3
80°	526.0	551.6	564.4	545.1	493.8	429.8	359.2	282.2	224.5	186.0	186.0
82.5°	404.1	429.8	442.5	410.5	359.2	307.9	256.6	198.8	153.9	121.9	115.5
85°	141.1	134.7	160.4	166.8	198.8	186.0	153.9	115.5	89.8	64.2	57.7
87.5°	38.5	38.5	44.9	44.9	38.5	32.0	32.0	32.0	25.7	19.3	19.3
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)