

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: P651607

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

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)
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-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43997.8 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

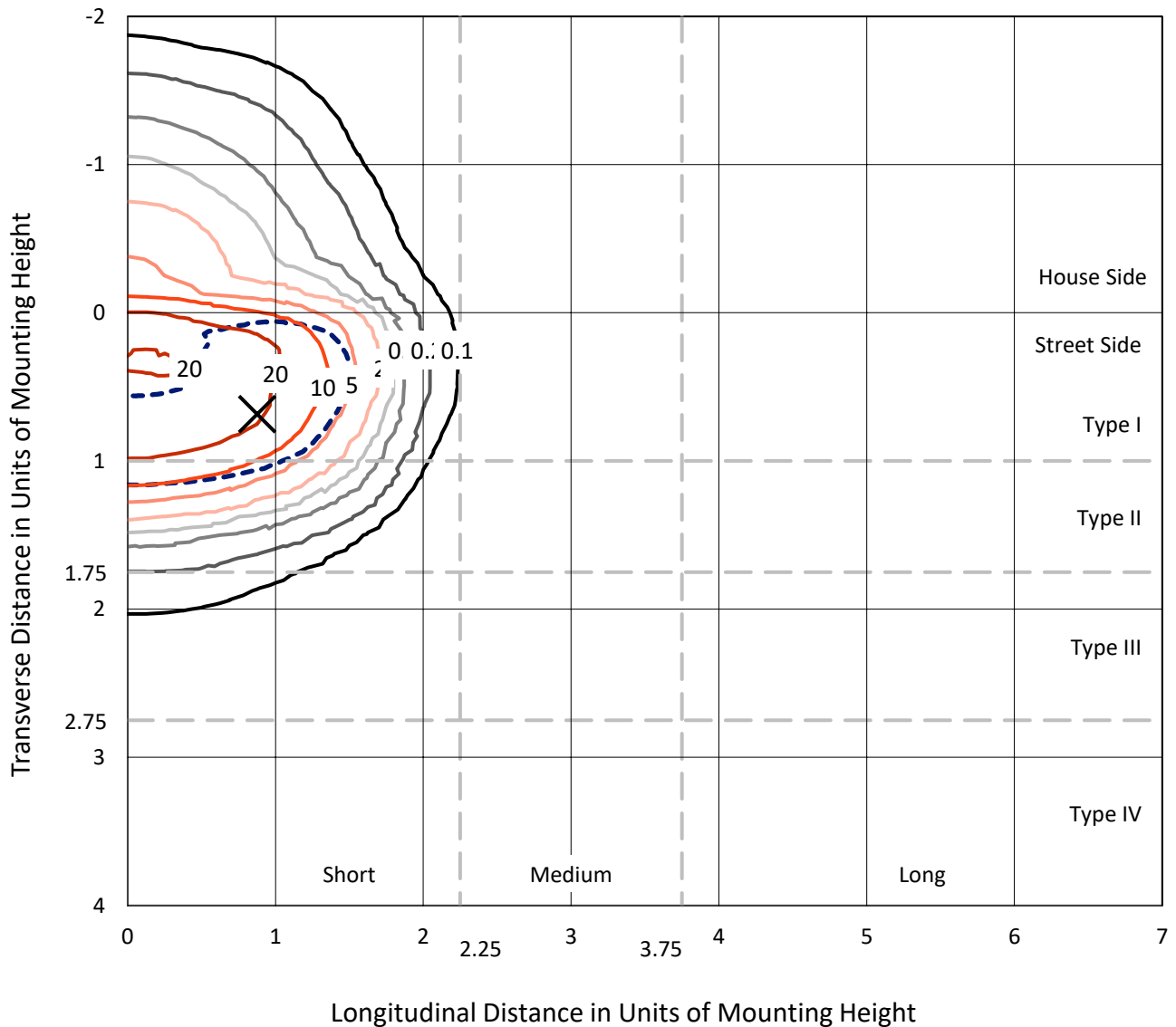
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

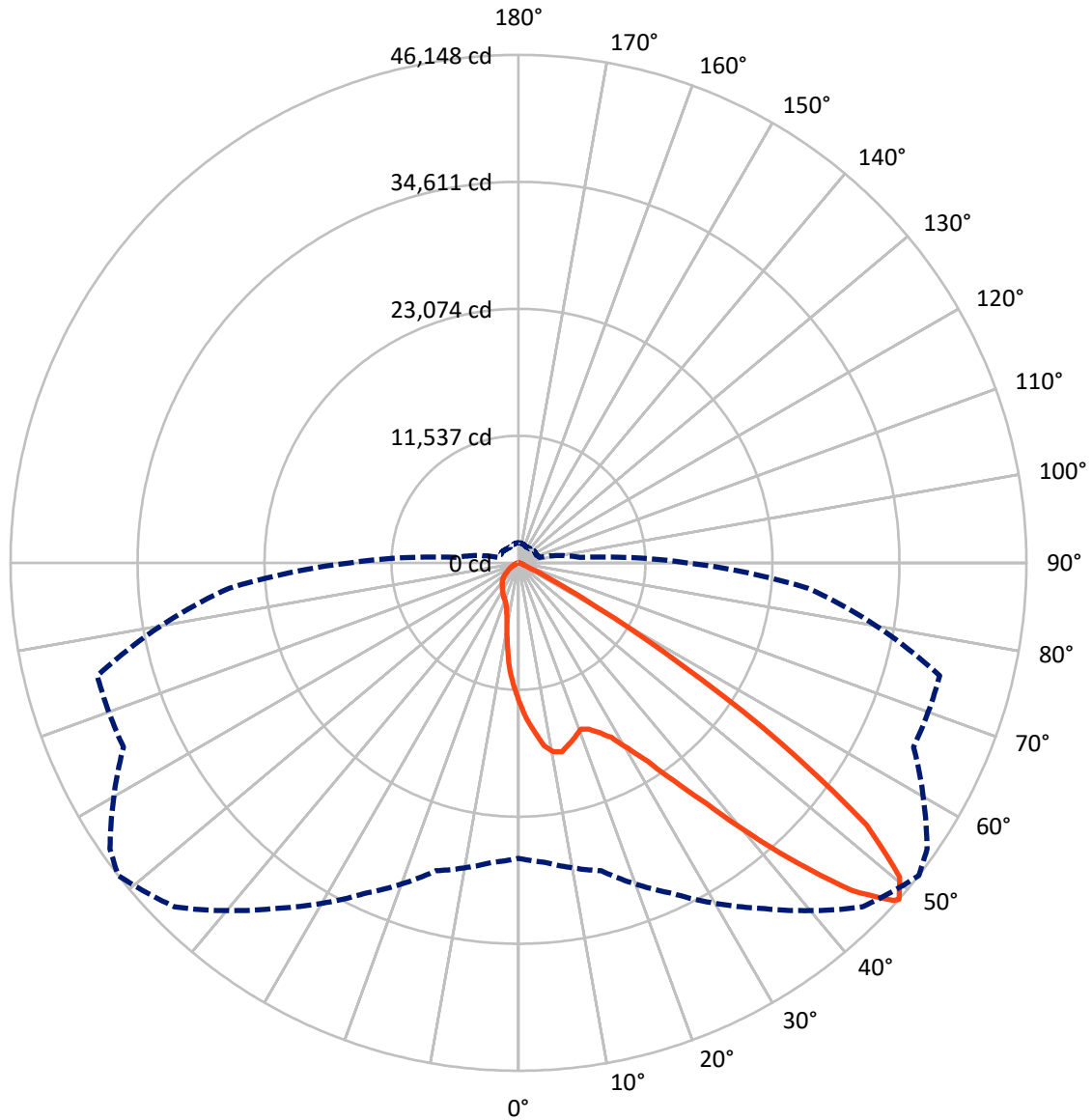
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 28.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral - - - Horizontal Cone Through 48-Deg Vertical

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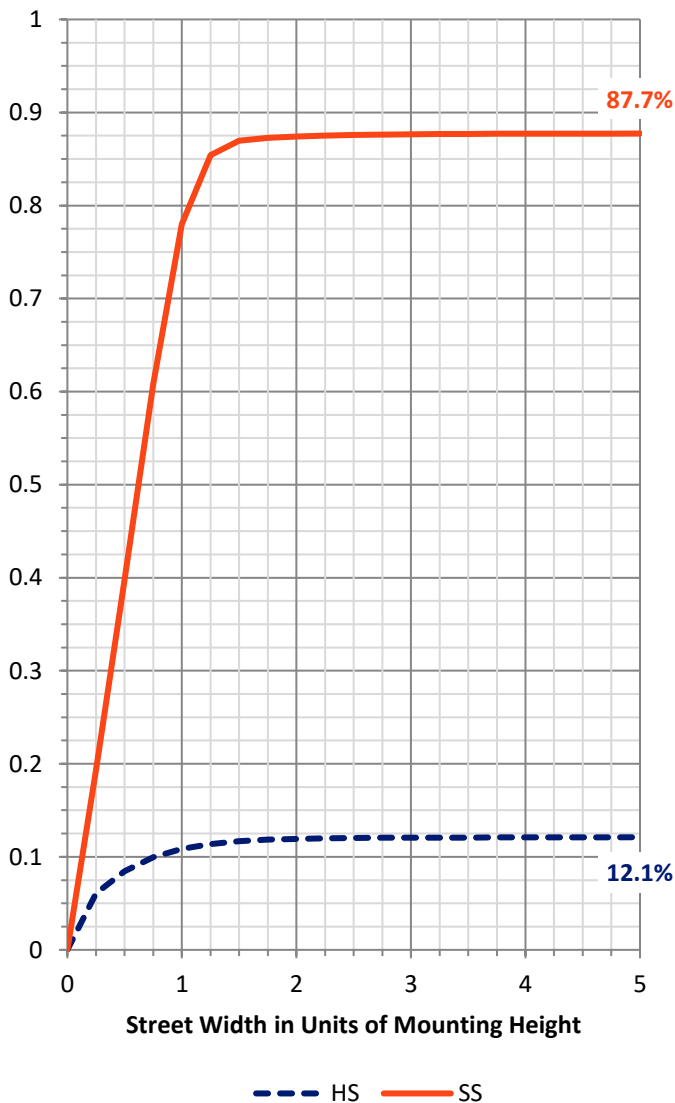
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5357.1	0.0	5357.1
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	38640.7	0.0	38640.7
	% Fixture	87.8	0.0	87.8
Total	Lumens	43997.8	0.0	43997.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1163.0	2.6
10°-20°	3039.2	6.9
20°-30°	5189.2	11.8
30°-40°	9555.8	21.7
40°-50°	14840.2	33.7
50°-60°	8931.3	20.3
60°-70°	1033.0	2.3
70°-80°	200.0	0.5
80°-90°	46.3	0.1
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°	43997.8	100.0
0°-180°	43997.8	100.0

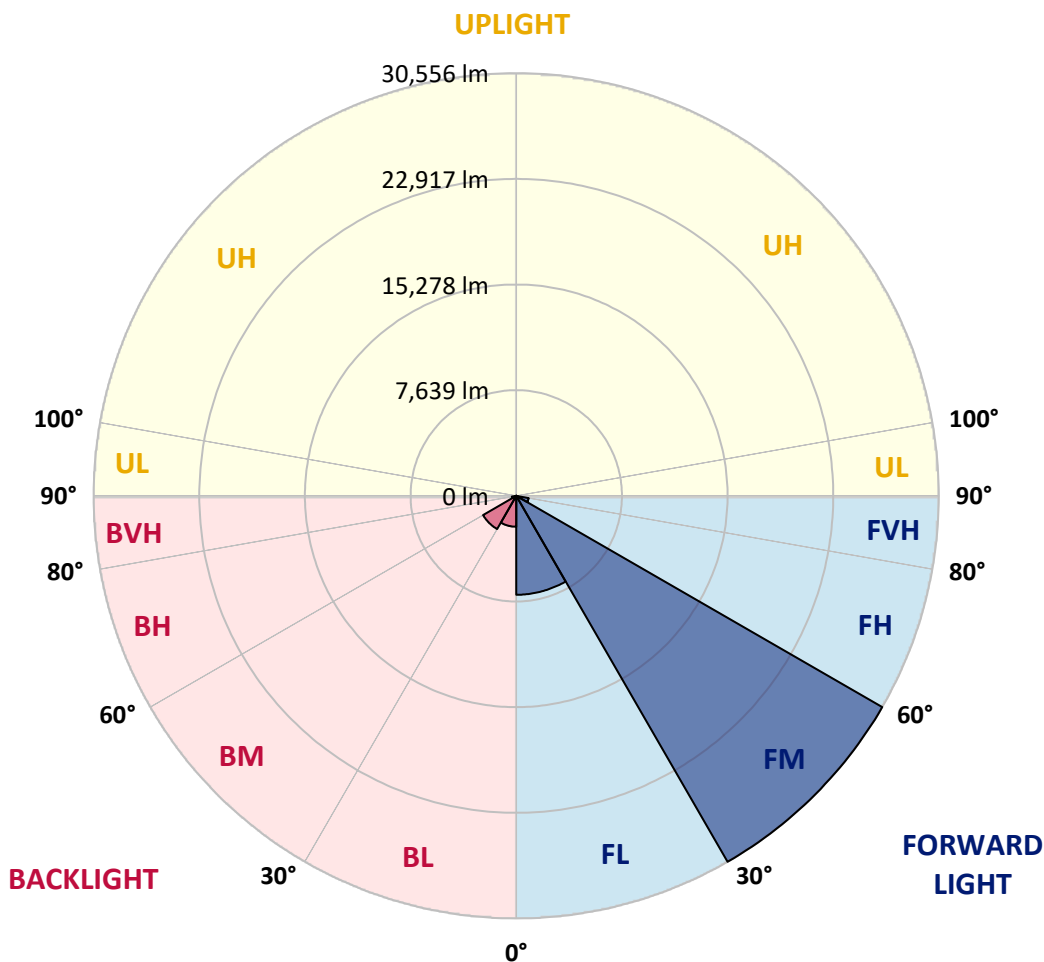


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7153.5	16.3			
FM (30°-60°)	30555.6	69.4			
FH (60°-80°)	909.6	2.1			G1/1800
FVH (80°-90°)	22.0	0.1			G1/100
BL (0°-30°)	2237.8	5.1	B3/2500		
BM (30°-60°)	2771.7	6.3	B3/5000		
BH (60°-80°)	323.3	0.7	B1/500		G1/500
BVH (80°-90°)	24.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8
2.5°	15399.6	15046.8	15079.0	14848.0	14713.4	14495.3	14200.3	14142.5	13821.8	13385.7	12943.2
5°	16785.0	16701.7	16810.7	16477.1	16490.0	16130.8	15438.2	15450.9	14713.4	14001.4	13315.1
7.5°	16874.8	16682.4	16791.4	17086.5	17259.7	17195.5	16804.3	16464.3	15765.2	14719.8	13719.2
10°	15111.0	15476.6	15592.1	16079.5	16772.2	17503.4	17458.5	17477.7	16894.1	15527.9	14065.6
12.5°	14052.7	13809.0	14200.3	14495.3	15540.8	16958.2	17606.0	17747.1	17792.0	16310.4	14411.9
15°	13571.7	13571.7	13635.8	13719.2	14476.0	15784.5	17105.7	17516.2	18484.7	17336.6	14957.1
17.5°	13873.1	13860.4	13950.1	13776.9	14059.2	15066.1	16643.9	17112.2	19260.8	18343.6	15386.8
20°	14790.3	14835.2	14777.5	14277.2	14296.5	15053.3	16130.8	16868.4	19786.7	19215.8	15957.6
22.5°	16066.7	16092.4	15765.2	15220.1	15059.7	15431.7	16425.8	16990.3	20210.0	20261.3	16130.8
25°	17541.8	17439.2	17375.1	16605.5	16118.0	16438.7	17092.9	17420.0	20473.0	21159.2	16624.7
27.5°	19587.9	19382.6	18991.4	18305.1	17945.9	17490.5	17958.8	18497.5	21223.4	22416.4	17163.5
30°	22608.8	22429.2	21665.9	20780.9	19838.0	19389.0	19536.6	19831.6	22576.7	23872.3	17875.4
32.5°	27156.2	26777.8	25674.6	23987.8	22705.0	21467.1	21428.7	21743.0	23788.9	25886.2	18722.0
35°	32165.4	32050.0	30427.3	28689.1	26207.0	24295.6	24327.7	24494.5	26110.8	28528.7	19831.6
37.5°	35494.2	36129.2	35096.5	33230.1	31145.6	28413.4	27720.6	27778.3	29298.4	31658.7	21832.7
40°	38066.2	37527.4	37649.2	37213.1	35789.3	33929.2	32396.3	32094.8	32986.4	35122.2	23821.0
42.5°	36943.7	36969.4	37719.8	38752.4	39105.2	38970.5	37405.5	36834.7	36142.0	37957.1	25713.1
45°	33775.3	34435.9	35410.8	38143.1	40541.9	42793.2	42485.3	41536.1	38322.7	40202.0	26803.4
47.5°	28721.2	28695.5	30292.6	33845.9	39175.7	44447.9	45846.1	45179.1	39868.4	39951.8	26579.0
48°	26854.7	27316.5	28964.9	33146.8	38309.9	44204.2	46147.6	45307.4	39605.5	39618.3	26386.5
50°	19850.9	19767.5	21819.9	26950.9	34217.9	41536.1	44877.7	45531.8	39599.1	37931.5	25039.6
52.5°	10486.6	10845.8	12340.2	16945.4	24193.0	33993.4	39586.2	40606.0	38200.8	35173.5	23102.7
55°	4457.6	4027.9	5175.9	7651.8	13610.2	22711.4	29041.9	31312.4	32300.1	31126.3	20210.0
57.5°	1590.7	1738.2	2001.2	2879.8	5721.2	12430.1	17317.4	19081.2	22377.9	22839.7	13770.5
60°	1019.8	1039.1	1122.4	1321.2	2148.7	4791.2	8216.1	9620.8	11115.2	11474.4	6426.7
62.5°	788.9	795.3	833.8	865.9	1019.8	1860.0	3085.0	3655.9	3797.0	3264.7	1686.9
65°	660.6	667.1	679.9	679.9	724.8	872.3	1077.5	1186.6	1154.5	1141.7	955.6
67.5°	506.7	519.5	545.1	545.1	570.9	532.4	596.5	635.0	718.4	872.3	814.6
70°	397.6	404.1	423.3	436.1	436.1	384.8	429.8	468.2	526.0	647.8	641.3
72.5°	307.9	320.7	333.5	333.5	314.3	263.0	307.9	339.9	378.4	449.0	436.1
75°	237.3	237.3	243.7	198.8	153.9	134.7	186.0	224.5	282.2	295.0	243.7
77.5°	64.2	70.6	64.2	57.7	64.2	96.2	121.9	141.1	179.6	179.6	160.4
80°	0.0	6.4	19.3	38.5	64.2	89.8	109.0	121.9	141.1	153.9	147.5
82.5°	0.0	6.4	19.3	38.5	57.7	70.6	96.2	102.6	115.5	134.7	134.7
85°	0.0	6.4	12.9	25.7	38.5	44.9	44.9	38.5	38.5	32.0	25.7
87.5°	0.0	0.0	6.4	12.9	12.9	19.3	19.3	19.3	19.3	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8	12705.8
2.5°	12770.0	12571.1	12269.7	11795.0	11339.7	11044.6	10762.4	10448.2	10275.0	10262.1	10165.9
5°	12923.9	12474.9	11756.6	10942.0	10069.7	9319.3	8562.5	8068.6	7626.0	7382.3	7337.5
7.5°	13007.2	12423.6	11262.7	9896.6	8408.6	7183.5	6336.9	5714.8	5471.0	5291.4	5285.0
10°	13180.4	12333.9	10525.1	8511.2	6670.4	5432.5	4848.9	4566.6	4432.0	4380.7	4303.6
12.5°	13308.7	12167.1	9768.3	7087.3	5272.1	4502.5	4246.0	4181.8	4188.3	4213.9	4181.8
15°	13488.3	12019.6	8748.5	5817.4	4425.5	4053.5	4053.5	4066.4	4156.1	4169.0	4162.6
17.5°	13475.5	11730.9	7696.6	4791.2	3912.4	3861.1	3880.4	4002.2	4059.9	4079.2	4034.3
20°	13629.4	11461.6	6612.7	4092.1	3623.8	3700.8	3829.1	3861.1	3931.7	3944.5	3893.2
22.5°	13584.5	10788.1	5605.7	3540.4	3405.7	3553.3	3681.6	3720.0	3700.8	3662.3	3655.9
25°	13501.2	10210.8	4682.1	3174.9	3245.4	3405.7	3527.6	3457.1	3418.6	3425.0	3431.4
27.5°	13353.7	9479.7	3918.9	2918.3	3027.3	3264.7	3258.2	3232.6	3271.1	3239.0	3271.1
30°	13328.0	8748.5	3290.3	2687.4	2867.0	3040.1	3053.0	3097.9	3142.8	3085.0	3142.8
32.5°	13366.4	7946.8	2841.3	2546.3	2770.8	2777.2	2918.3	2963.2	2931.1	2802.9	2815.7
35°	13661.5	7331.0	2514.3	2469.3	2616.9	2623.2	2758.0	2700.2	2559.2	2482.1	2527.0
37.5°	14283.6	6817.9	2360.3	2398.8	2411.6	2495.0	2501.4	2385.9	2398.8	2392.4	2418.0
40°	15079.0	6426.7	2251.3	2334.6	2321.8	2379.5	2148.7	2212.8	2270.5	2289.7	2302.6
42.5°	15624.1	6144.4	2180.7	2232.0	2206.4	2103.8	1975.4	2039.6	2084.5	2155.1	2167.8
45°	15867.8	5920.0	2097.3	2052.5	2052.5	1866.4	1815.1	1827.9	1930.6	2007.6	1994.7
47.5°	15470.2	5701.9	1949.8	1815.1	1860.0	1706.1	1648.4	1648.4	1757.4	1853.6	1834.4
48°	15316.3	5612.1	1956.3	1763.8	1795.9	1680.4	1622.7	1609.8	1731.7	1821.5	1821.5
50°	14553.0	5278.6	1789.5	1622.7	1558.5	1545.8	1507.2	1520.1	1597.1	1680.4	1680.4
52.5°	13065.0	4560.2	1513.6	1391.8	1276.4	1353.3	1372.6	1346.9	1385.4	1462.3	1455.9
55°	10903.6	3501.9	1212.2	1154.5	1064.7	1148.0	1186.6	1154.5	1116.0	1173.7	1173.7
57.5°	6984.7	1885.7	968.5	981.3	891.5	974.9	1007.0	930.0	859.4	904.3	897.9
60°	3149.2	1128.9	795.3	776.1	718.4	814.6	865.9	776.1	679.9	711.9	744.0
62.5°	1180.2	801.7	602.9	590.0	577.3	667.1	692.7	622.2	526.0	545.1	551.6
65°	865.9	705.5	481.1	436.1	461.8	526.0	513.1	442.5	378.4	378.4	391.2
67.5°	737.6	615.7	391.2	339.9	339.9	346.3	320.7	282.2	263.0	275.8	288.6
70°	577.3	487.4	307.9	263.0	237.3	211.7	186.0	179.6	160.4	179.6	173.2
72.5°	372.0	327.1	237.3	198.8	179.6	147.5	121.9	115.5	96.2	89.8	89.8
75°	198.8	198.8	186.0	160.4	141.1	115.5	96.2	77.0	51.3	38.5	38.5
77.5°	141.1	153.9	166.8	153.9	128.3	96.2	77.0	51.3	25.7	12.9	12.9
80°	134.7	153.9	166.8	147.5	128.3	96.2	70.6	38.5	19.3	6.4	6.4
82.5°	121.9	141.1	153.9	134.7	115.5	83.3	64.2	38.5	19.3	6.4	6.4
85°	25.7	32.0	38.5	38.5	44.9	57.7	44.9	32.0	12.9	6.4	6.4
87.5°	19.3	19.3	19.3	19.3	19.3	19.3	12.9	12.9	6.4	6.4	6.4
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)