

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: P651347

Luminaire Tested: **GALN-SA4D-840-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-840-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21170.5 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G4

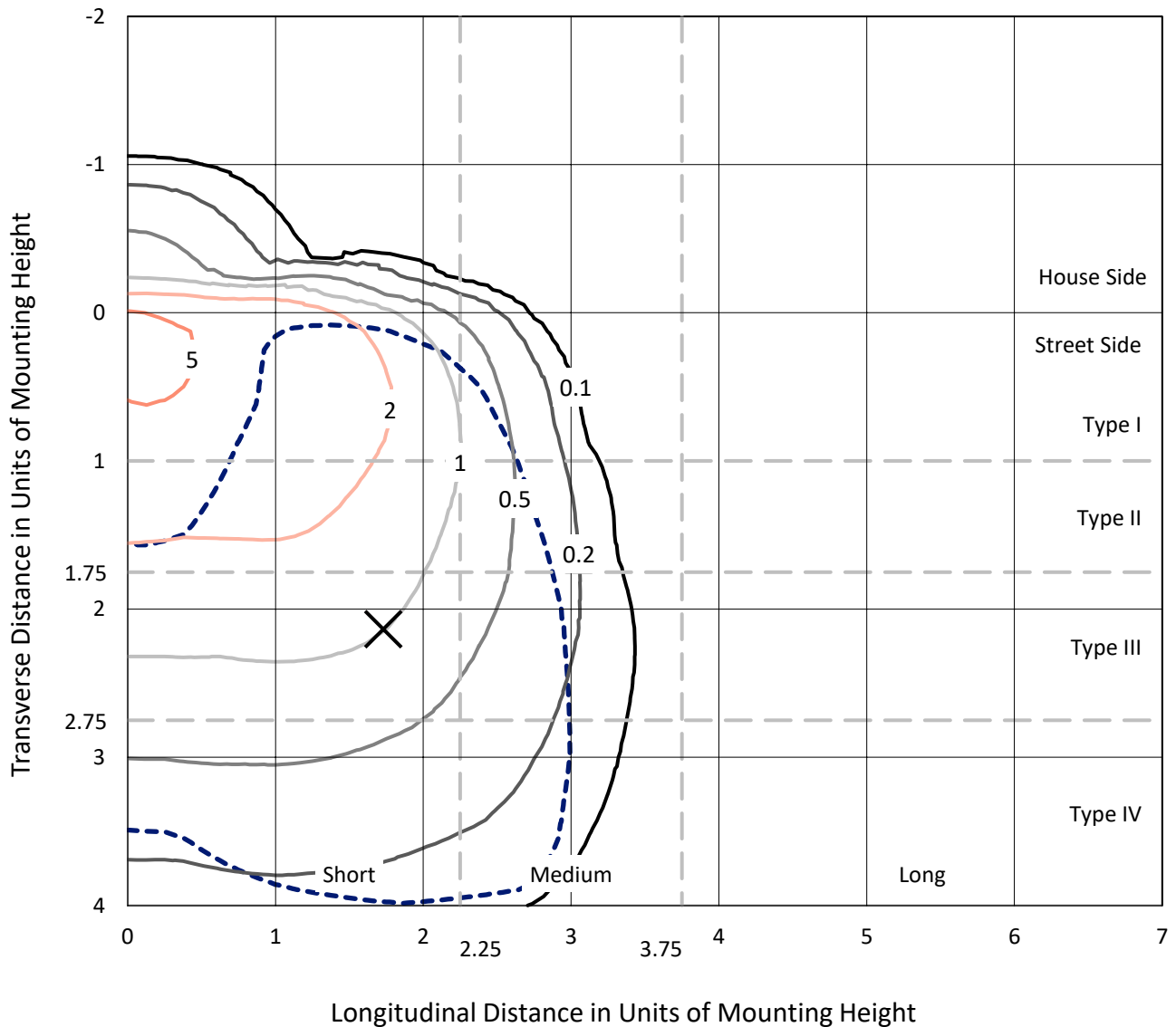
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

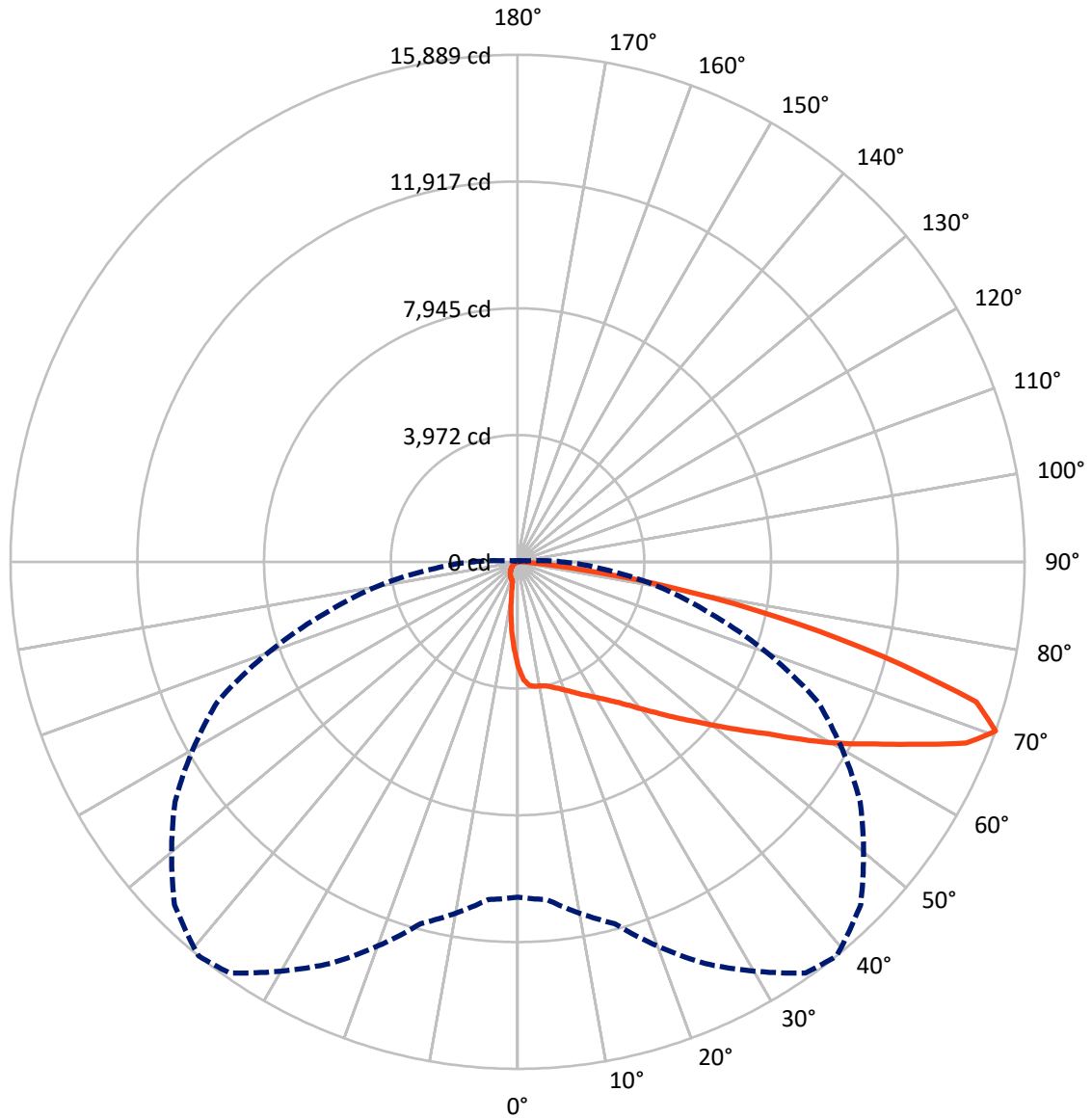
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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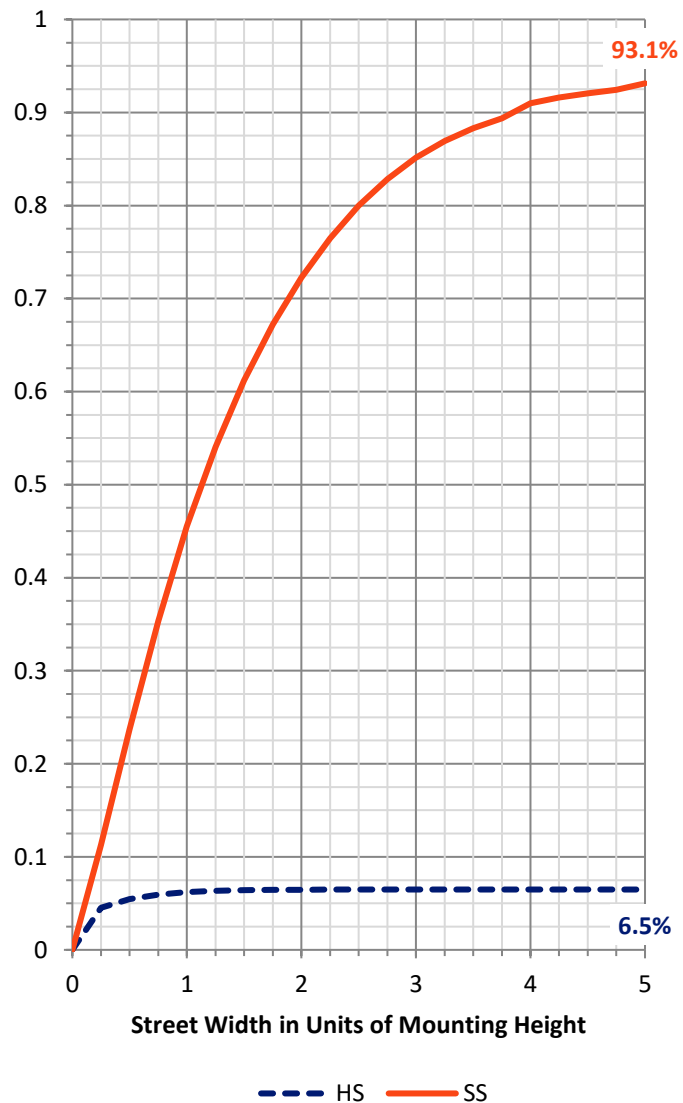
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1380.4	0.0	1380.4
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	19790.1	0.0	19790.1
	% Fixture	93.5	0.0	93.5
Total	Lumens	21170.5	0.0	21170.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.8	1.3
10°-20°	732.2	3.5
20°-30°	1226.6	5.8
30°-40°	1902.3	9.0
40°-50°	3014.6	14.2
50°-60°	4419.0	20.9
60°-70°	5664.1	26.8
70°-80°	3559.1	16.8
80°-90°	370.8	1.8
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°	21170.5	100.0
0°-180°	21170.5	100.0

Coefficient of Utilization



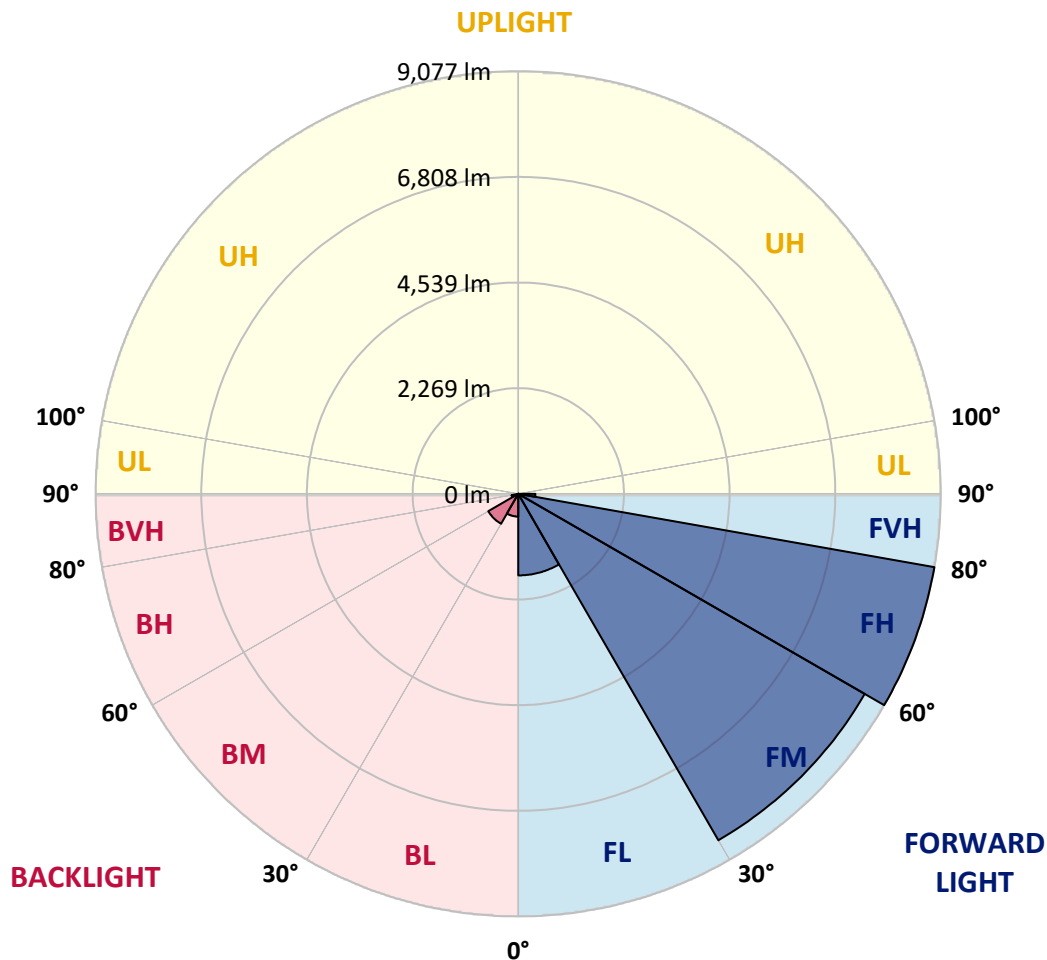
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1751.7	8.3			
FM (30°-60°)	8593.1	40.6			
FH (60°-80°)	9077.2	42.9			G4/12000
FVH (80°-90°)	368.1	1.7			G3/500
BL (0°-30°)	488.8	2.3	B1/500		
BM (30°-60°)	742.9	3.5	B1/1000		
BH (60°-80°)	146.0	0.7	B1/500		G1/500
BVH (80°-90°)	2.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4
2.5°	3816.9	3804.1	3787.0	3767.1	3710.2	3700.2	3666.1	3593.5	3506.7	3435.7	3337.4
5°	3997.5	4004.7	3991.9	3956.3	3915.0	3890.9	3848.2	3735.8	3623.4	3479.7	3319.0
7.5°	4038.8	4053.0	4037.4	4003.2	3963.4	3937.8	3903.7	3807.0	3676.0	3512.4	3291.9
10°	4034.5	4051.6	4041.7	4010.4	3977.7	3953.5	3916.5	3839.7	3734.4	3562.2	3300.5
12.5°	4027.5	4050.2	4048.7	4033.1	4006.1	3987.6	3964.8	3896.5	3798.4	3634.8	3347.4
15°	4007.5	4036.0	4061.6	4074.4	4075.8	4075.8	4047.3	3974.8	3880.9	3730.1	3408.6
17.5°	4016.0	4048.7	4112.8	4149.7	4175.4	4172.5	4142.7	4064.4	3960.6	3828.2	3472.6
20°	4068.7	4112.8	4202.4	4276.4	4302.0	4293.5	4253.6	4162.6	4044.5	3912.2	3535.2
22.5°	4198.2	4238.0	4350.4	4437.1	4455.6	4432.9	4376.0	4252.2	4145.5	4003.2	3610.6
25°	4391.6	4438.5	4542.4	4607.8	4607.8	4595.1	4515.4	4370.3	4259.3	4129.9	3708.8
27.5°	4626.3	4666.2	4768.6	4826.9	4792.8	4755.9	4676.1	4501.2	4394.5	4289.2	3826.9
30°	4863.9	4889.6	4997.6	5023.3	4987.7	4940.8	4855.4	4680.4	4586.6	4505.4	3997.5
32.5°	5088.7	5144.2	5233.8	5228.2	5179.7	5157.0	5078.7	4892.3	4839.8	4831.2	4236.5
35°	5313.5	5356.2	5435.8	5455.7	5413.1	5408.8	5351.9	5213.9	5215.3	5270.8	4609.3
37.5°	5507.0	5545.4	5639.2	5683.4	5691.9	5713.2	5690.5	5599.5	5728.9	5881.1	5102.9
40°	5669.2	5723.2	5842.7	5919.5	6007.7	6086.0	6090.3	6110.1	6370.5	6632.3	5747.4
42.5°	5795.8	5871.2	6044.7	6187.0	6389.0	6488.6	6568.2	6677.8	7116.0	7507.2	6507.1
45°	5960.8	6047.5	6263.8	6487.1	6802.9	6966.6	7077.5	7370.6	7992.3	8525.7	7286.7
47.5°	6233.9	6279.4	6499.9	6825.7	7241.1	7474.5	7690.7	8134.6	8932.6	9410.6	7935.3
50°	6585.3	6615.2	6781.7	7234.0	7771.8	8079.1	8473.2	8995.3	9908.6	10144.7	8302.4
52.5°	6973.7	6983.7	7108.8	7683.5	8366.4	8753.4	9194.4	9838.9	10703.8	10668.3	8545.7
55°	7424.7	7410.4	7517.1	8171.5	9070.6	9513.1	10026.7	10702.4	11393.8	11039.6	8685.1
57.5°	7941.1	7902.6	8006.5	8818.8	9972.6	10501.8	11023.9	11447.9	11928.7	11351.1	8752.0
60°	8481.7	8404.9	8528.6	9545.8	11035.3	11537.4	11971.4	12085.2	12492.0	11598.7	8636.7
62.5°	8912.7	8914.1	9144.6	10319.7	12127.8	12567.4	12797.9	12900.4	12977.1	11544.6	8030.7
65°	9585.6	9608.3	9976.9	11393.8	13392.5	13773.8	13931.8	13598.8	12998.5	10873.1	7120.2
67.5°	10279.9	10352.4	11026.7	12873.3	14853.6	15160.9	14957.4	13734.0	12418.0	9340.9	5398.9
70°	10506.0	10625.5	11736.6	13891.9	15729.9	15889.3	15200.7	13103.8	10380.9	6245.3	2717.2
72.5°	9626.8	9820.4	11328.4	13520.6	15170.8	15032.8	13600.2	10989.8	6599.5	2371.5	829.4
75°	6788.7	6874.1	9414.9	11215.9	12201.8	11810.6	10345.3	7084.7	2714.3	665.8	284.5
77.5°	3505.4	3464.1	5599.5	7441.8	8702.2	8296.7	6774.5	3667.5	1028.5	277.4	176.4
80°	1812.4	1842.3	2422.8	3899.4	5312.1	4888.1	3612.0	1700.0	547.7	153.7	135.1
82.5°	1015.8	953.2	1392.8	1702.9	2483.9	1947.6	1385.6	1203.6	239.0	92.5	128.0
85°	184.9	193.5	764.0	920.5	862.1	547.7	446.7	803.7	69.7	51.2	89.7
87.5°	2.9	2.9	147.9	264.6	167.9	76.8	140.9	115.2	14.2	19.9	15.6
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°	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4	3303.4
2.5°	3287.6	3233.6	3132.6	3033.1	2906.4	2802.5	2732.8	2660.3	2586.3	2592.0	2609.1
5°	3230.8	3136.8	2937.7	2727.2	2525.2	2343.0	2163.8	2003.0	1937.6	1877.9	1880.7
7.5°	3173.8	3041.6	2749.9	2419.9	2114.0	1803.9	1579.1	1394.1	1296.0	1222.1	1200.7
10°	3148.3	2973.3	2577.7	2123.9	1690.1	1351.5	1062.7	911.9	795.2	758.2	768.3
12.5°	3159.6	2939.1	2422.8	1856.5	1340.1	941.8	739.7	663.0	637.3	633.1	630.2
15°	3181.0	2914.9	2270.5	1560.6	984.5	700.0	621.7	607.5	604.6	601.7	603.2
17.5°	3209.4	2893.6	2108.3	1283.2	755.4	611.7	589.0	581.9	580.5	580.5	580.5
20°	3237.8	2869.4	1927.7	1035.7	630.2	577.6	563.4	559.1	557.7	557.7	556.2
22.5°	3270.6	2848.0	1744.1	813.8	580.5	553.4	540.6	537.7	536.3	534.9	534.9
25°	3317.6	2821.1	1549.2	665.8	549.2	530.7	517.8	515.0	513.6	507.9	509.3
27.5°	3380.1	2801.1	1348.6	574.7	520.7	502.2	493.7	489.4	486.5	482.2	483.7
30°	3465.5	2784.0	1135.3	525.0	487.9	472.3	463.8	461.0	458.1	453.8	453.8
32.5°	3613.4	2791.2	910.5	485.1	458.1	439.6	431.0	428.2	425.4	421.1	421.1
35°	3835.4	2832.4	728.4	450.9	422.5	404.0	395.5	395.5	391.2	385.5	384.1
37.5°	4198.2	2937.7	584.7	418.2	388.4	371.3	361.4	358.5	354.2	345.7	344.3
40°	4626.3	3101.3	492.2	385.5	357.1	340.0	331.4	322.9	311.6	303.0	301.6
42.5°	5164.1	3269.2	426.8	352.8	327.2	311.6	301.6	287.4	270.3	258.9	257.5
45°	5724.6	3422.8	382.7	322.9	298.7	285.9	274.6	251.8	230.4	216.2	214.8
47.5°	6142.8	3451.3	347.1	294.5	274.6	261.8	246.1	217.7	189.2	176.4	172.2
50°	6340.6	3313.3	310.2	266.0	250.4	236.2	216.2	183.5	152.2	136.6	133.7
52.5°	6410.4	3074.3	280.2	240.4	226.2	209.2	184.9	147.9	119.5	103.9	102.4
55°	6381.8	2772.7	253.2	216.2	197.7	177.8	153.7	118.1	88.2	75.4	72.6
57.5°	6232.5	2388.6	226.2	192.1	169.3	149.4	122.4	88.2	59.7	48.4	46.9
60°	5829.9	1865.1	199.1	165.0	143.6	122.4	96.7	62.6	37.0	27.0	27.0
62.5°	5149.9	1384.2	173.6	138.0	120.9	98.1	68.3	39.9	19.9	14.2	12.8
65°	4303.4	1021.5	145.1	116.6	101.0	76.8	48.4	24.2	9.9	4.3	2.9
67.5°	3003.1	630.2	120.9	95.3	82.5	55.5	29.9	9.9	4.3	0.0	0.0
70°	1364.3	300.2	92.5	72.6	62.6	39.9	15.6	5.7	2.9	0.0	0.0
72.5°	423.9	157.9	65.4	52.6	42.6	25.6	8.5	4.3	2.9	0.0	0.0
75°	196.3	101.0	41.3	28.4	24.2	12.8	5.7	2.9	1.4	0.0	0.0
77.5°	146.5	78.2	24.2	15.6	12.8	8.5	4.3	2.9	1.4	0.0	0.0
80°	128.0	39.9	14.2	9.9	7.1	5.7	2.9	1.4	0.0	0.0	0.0
82.5°	115.2	19.9	8.5	5.7	4.3	2.9	1.4	1.4	0.0	0.0	0.0
85°	62.6	11.4	5.7	4.3	2.9	1.4	1.4	0.0	0.0	0.0	0.0
87.5°	11.4	5.7	4.3	2.9	2.9	1.4	1.4	1.4	0.0	0.0	0.0
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)