

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: P453093

Luminaire Tested: **GALN-SA4A-760-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453093
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-760-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14822 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

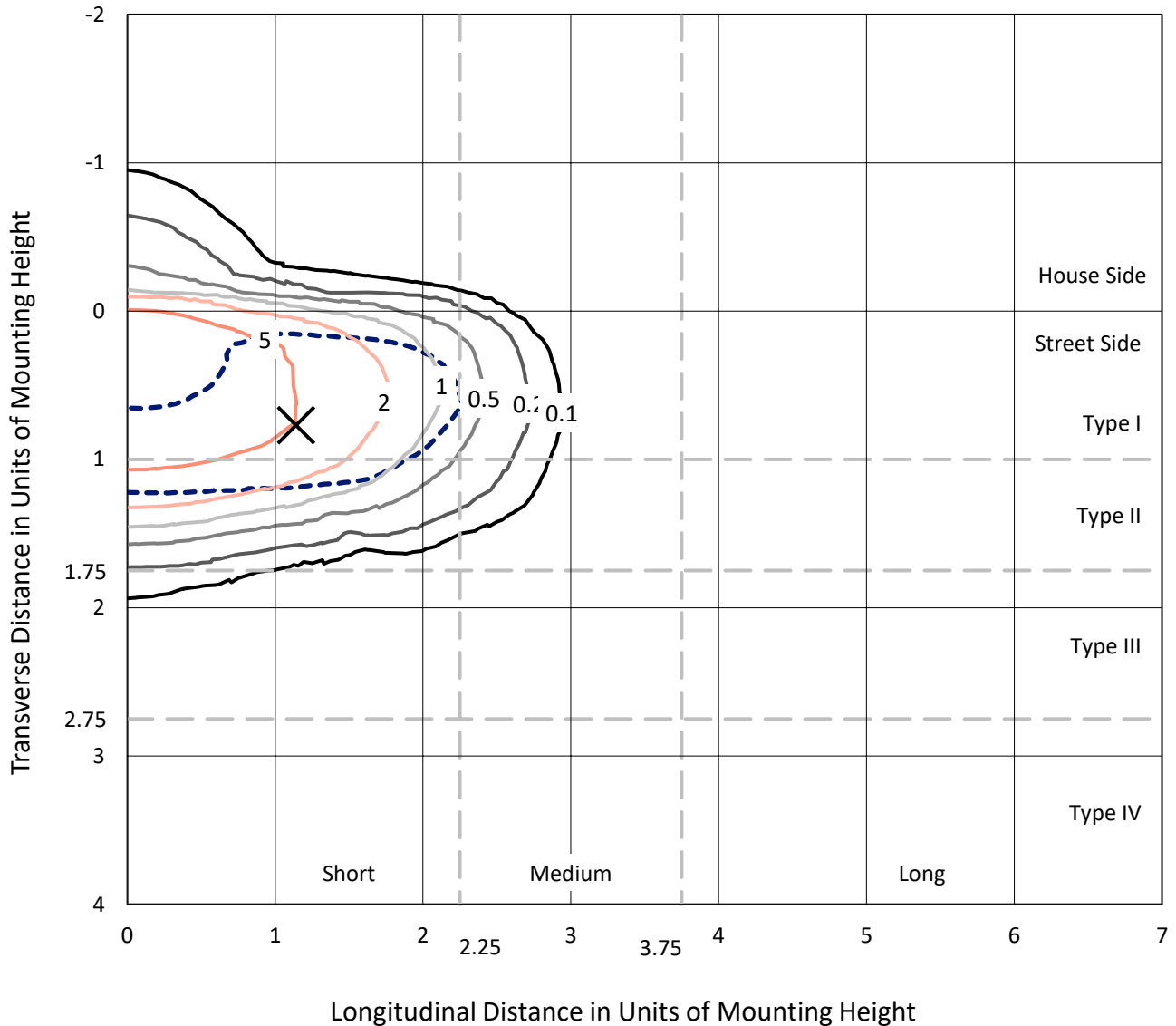
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

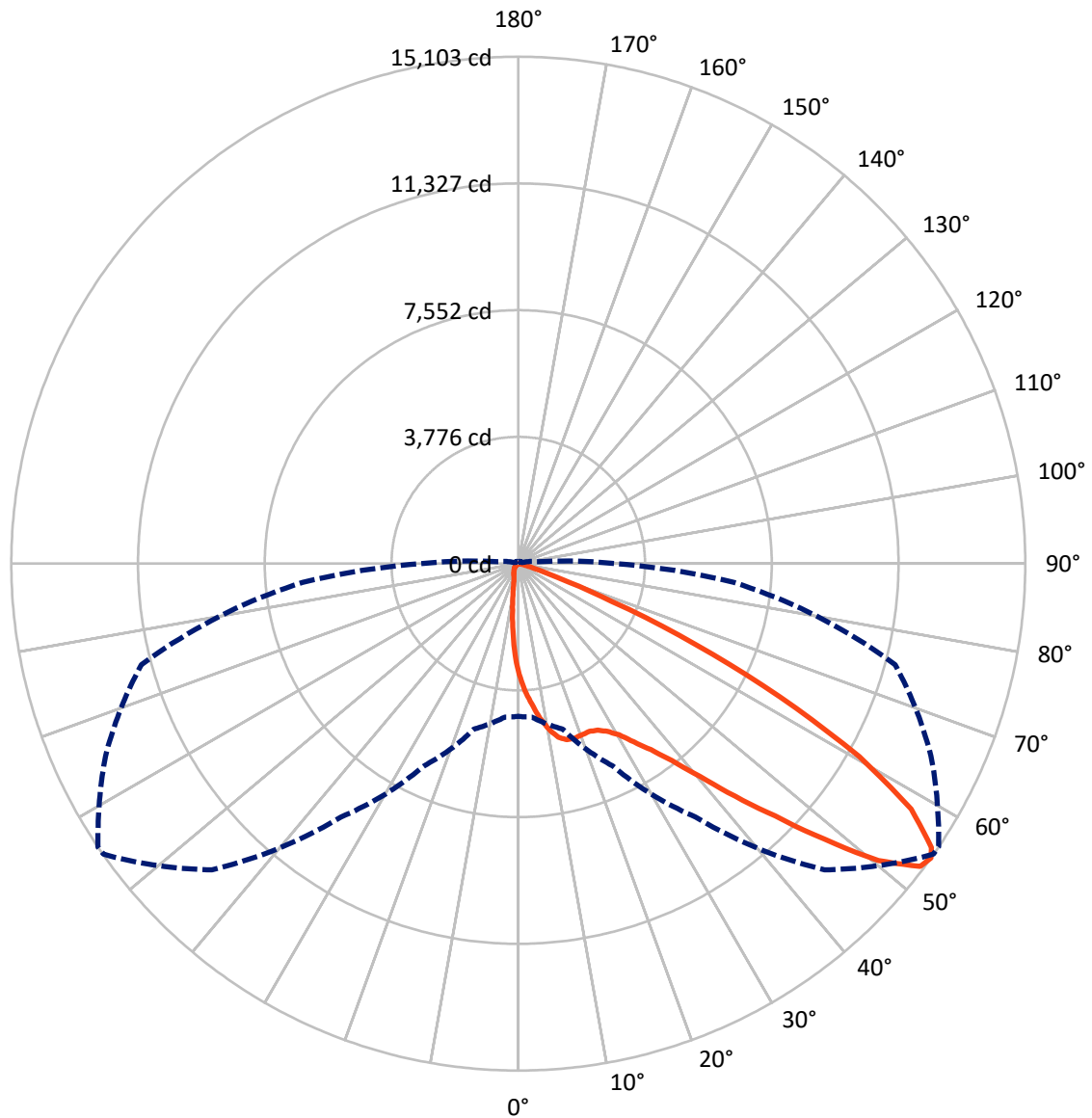
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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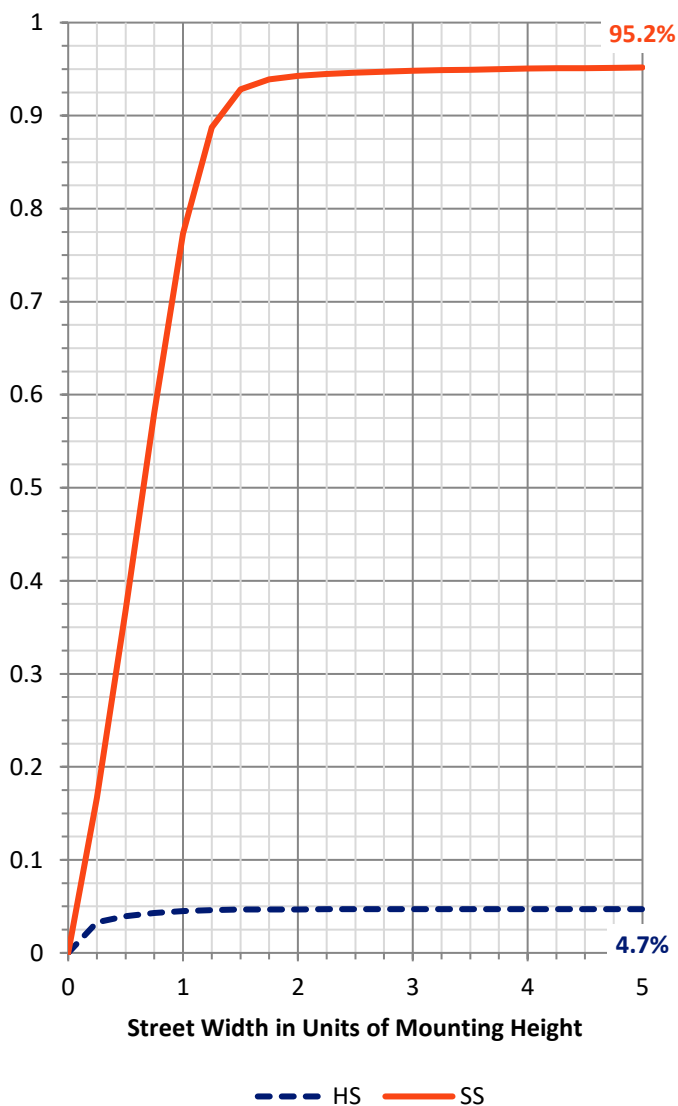
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	700.9	0.0	700.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	14121.1	0.0	14121.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	14822.0	0.0	14822.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.0	2.0
10°-20°	786.6	5.3
20°-30°	1362.4	9.2
30°-40°	2351.7	15.9
40°-50°	4002.7	27.0
50°-60°	3961.2	26.7
60°-70°	1808.0	12.2
70°-80°	232.2	1.6
80°-90°	26.2	0.2
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°	14822.0	100.0
0°-180°	14822.0	100.0

Coefficient of Utilization



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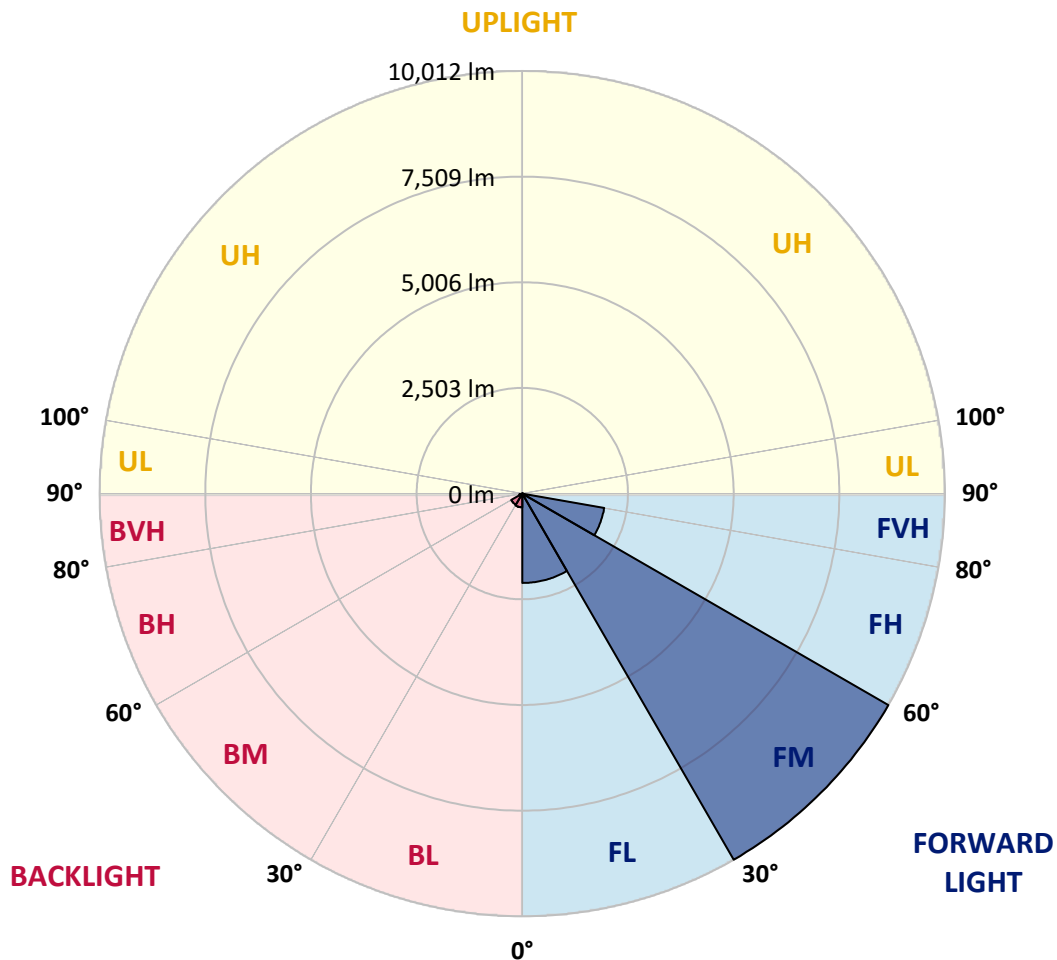
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2115.9	14.3			
FM (30°-60°)	10011.9	67.5			
FH (60°-80°)	1970.0	13.3			G2/5000
FVH (80°-90°)	23.4	0.2			G1/100
BL (0°-30°)	324.1	2.2	B1/500		
BM (30°-60°)	303.8	2.0	B1/1000		
BH (60°-80°)	70.2	0.5	B0/110		G0/110
BVH (80°-90°)	2.8	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0
2.5°	4185.0	4156.0	4116.0	4085.0	4012.0	3907.0	3796.0	3796.0	3689.0	3540.0	3388.0
5°	4827.0	4808.0	4769.0	4689.0	4607.0	4460.0	4237.0	4198.0	4007.0	3737.0	3453.0
7.5°	5088.0	5097.0	5099.0	5078.0	5039.0	4894.0	4673.0	4646.0	4341.0	3979.0	3538.0
10°	4838.0	4882.0	4925.0	5012.0	5135.0	5170.0	5045.0	5017.0	4717.0	4224.0	3630.0
12.5°	4466.0	4490.0	4514.0	4651.0	4898.0	5181.0	5312.0	5311.0	5057.0	4468.0	3747.0
15°	4293.0	4314.0	4316.0	4377.0	4591.0	5003.0	5426.0	5441.0	5389.0	4769.0	3873.0
17.5°	4329.0	4346.0	4332.0	4347.0	4459.0	4807.0	5413.0	5463.0	5658.0	5058.0	3987.0
20°	4564.0	4597.0	4543.0	4501.0	4535.0	4755.0	5369.0	5439.0	5848.0	5340.0	4091.0
22.5°	4986.0	5004.0	4936.0	4821.0	4761.0	4864.0	5357.0	5426.0	6010.0	5571.0	4151.0
25°	5455.0	5449.0	5374.0	5245.0	5119.0	5084.0	5436.0	5498.0	6144.0	5779.0	4169.0
27.5°	5924.0	5942.0	5816.0	5656.0	5505.0	5414.0	5613.0	5659.0	6295.0	6016.0	4191.0
30°	6469.0	6440.0	6316.0	6133.0	5960.0	5833.0	5898.0	5911.0	6503.0	6330.0	4249.0
32.5°	7178.0	7098.0	6959.0	6639.0	6515.0	6300.0	6316.0	6332.0	6756.0	6641.0	4319.0
35°	8140.1	8136.1	7864.1	7433.1	7131.0	6864.0	6794.0	6807.0	7139.0	7103.0	4474.0
37.5°	9298.1	9314.1	9004.1	8570.1	8014.1	7590.1	7446.1	7448.1	7721.1	7741.1	4710.0
40°	10241.1	10283.1	10098.1	9805.1	9256.1	8593.1	8351.1	8329.1	8539.1	8514.1	5047.0
42.5°	10647.1	10686.1	10755.1	10857.1	10555.1	10008.1	9437.1	9467.1	9531.1	9356.1	5425.0
45°	10448.1	10510.1	10781.1	11411.1	11695.1	11511.1	10830.1	10725.1	10454.1	10271.1	5805.0
47.5°	9619.1	9770.1	10223.1	11272.1	12266.1	12888.1	12402.1	12263.1	11378.1	10939.1	6047.0
50°	8256.1	8265.1	8896.1	10237.1	11970.1	13757.1	14007.1	13903.1	12239.1	11314.1	6169.0
52.5°	5985.0	6182.0	6760.0	8313.1	10688.1	13625.1	15030.1	14987.1	13127.1	11506.1	6345.0
54°	4550.0	4588.0	5102.0	6643.0	9215.1	12900.1	15093.1	15103.1	13568.1	11622.1	6449.0
55°	3730.0	3639.0	4179.0	5659.0	8210.1	12259.1	14887.1	14935.1	13766.1	11682.1	6526.0
57.5°	1768.0	1769.0	2182.0	2985.0	5142.0	9519.1	13628.1	13798.1	13788.1	11785.1	6763.0
60°	895.0	901.0	992.0	1378.0	2540.0	6328.0	11268.1	11673.1	12727.1	11800.1	6841.0
62.5°	626.0	619.0	604.0	663.0	1069.0	3216.0	8389.1	8741.1	10813.1	11229.1	6593.0
65°	536.0	521.0	479.0	470.0	540.0	1281.0	5225.0	5799.0	8256.1	9723.1	5887.0
67.5°	458.0	452.0	414.0	391.0	382.0	558.0	2696.0	2998.0	5643.0	6989.0	4459.0
70°	389.0	386.0	363.0	334.0	309.0	334.0	1000.0	1239.0	3145.0	3763.0	2104.0
72.5°	316.0	319.0	323.0	286.0	260.0	237.0	427.0	497.0	1316.0	1345.0	736.0
75°	277.0	274.0	274.0	249.0	217.0	176.0	235.0	253.0	403.0	374.0	171.0
77.5°	195.0	188.0	220.0	205.0	181.0	125.0	134.0	142.0	167.0	143.0	80.0
80°	135.0	135.0	141.0	184.0	163.0	91.0	82.0	88.0	99.0	85.0	46.0
82.5°	76.0	78.0	92.0	98.0	95.0	61.0	54.0	55.0	66.0	58.0	29.0
85°	9.0	15.0	53.0	52.0	39.0	27.0	30.0	31.0	41.0	36.0	17.0
87.5°	1.0	2.0	11.0	14.0	10.0	11.0	11.0	11.0	14.0	16.0	12.0
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°	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0	3293.0
2.5°	3306.0	3230.0	3049.0	2839.0	2705.0	2487.0	2303.0	2170.0	2137.0	2073.0	2092.0
5°	3302.0	3144.0	2775.0	2385.0	1969.0	1659.0	1428.0	1246.0	1166.0	1113.0	1076.0
7.5°	3304.0	3057.0	2465.0	1844.0	1347.0	1043.0	829.0	718.0	644.0	613.0	617.0
10°	3310.0	2959.0	2105.0	1366.0	909.0	674.0	543.0	490.0	465.0	461.0	460.0
12.5°	3324.0	2852.0	1761.0	1014.0	636.0	490.0	440.0	422.0	414.0	414.0	411.0
15°	3339.0	2734.0	1475.0	754.0	490.0	421.0	398.0	389.0	384.0	384.0	383.0
17.5°	3339.0	2598.0	1208.0	585.0	422.0	387.0	369.0	357.0	353.0	353.0	352.0
20°	3318.0	2440.0	971.0	471.0	383.0	355.0	337.0	324.0	319.0	317.0	316.0
22.5°	3245.0	2229.0	773.0	405.0	351.0	327.0	304.0	289.0	285.0	283.0	284.0
25°	3115.0	1991.0	612.0	356.0	322.0	293.0	273.0	262.0	258.0	258.0	259.0
27.5°	2981.0	1742.0	485.0	319.0	287.0	261.0	245.0	238.0	237.0	240.0	241.0
30°	2857.0	1492.0	393.0	289.0	256.0	234.0	223.0	221.0	221.0	222.0	223.0
32.5°	2719.0	1273.0	329.0	263.0	231.0	212.0	206.0	206.0	208.0	208.0	210.0
35°	2632.0	1085.0	289.0	238.0	212.0	196.0	192.0	193.0	196.0	200.0	202.0
37.5°	2585.0	935.0	263.0	218.0	194.0	183.0	179.0	181.0	188.0	195.0	196.0
40°	2589.0	822.0	242.0	201.0	180.0	168.0	165.0	171.0	178.0	185.0	186.0
42.5°	2633.0	738.0	222.0	181.0	168.0	151.0	150.0	156.0	159.0	166.0	167.0
45°	2685.0	677.0	201.0	160.0	146.0	131.0	132.0	137.0	141.0	152.0	154.0
47.5°	2701.0	635.0	177.0	136.0	120.0	115.0	116.0	119.0	127.0	137.0	138.0
50°	2719.0	609.0	154.0	115.0	102.0	101.0	102.0	104.0	109.0	113.0	112.0
52.5°	2796.0	608.0	135.0	100.0	87.0	89.0	90.0	89.0	85.0	79.0	77.0
54°	2868.0	611.0	126.0	93.0	80.0	83.0	82.0	77.0	67.0	61.0	58.0
55°	2926.0	614.0	121.0	88.0	76.0	77.0	78.0	68.0	55.0	49.0	47.0
57.5°	3040.0	607.0	109.0	77.0	67.0	63.0	62.0	45.0	30.0	26.0	24.0
60°	2983.0	548.0	99.0	66.0	57.0	51.0	42.0	25.0	15.0	11.0	11.0
62.5°	2759.0	465.0	88.0	54.0	47.0	39.0	22.0	14.0	7.0	4.0	3.0
65°	2468.0	391.0	79.0	43.0	37.0	25.0	12.0	9.0	3.0	0.0	0.0
67.5°	1835.0	290.0	67.0	34.0	28.0	16.0	8.0	5.0	1.0	0.0	0.0
70°	850.0	177.0	57.0	26.0	20.0	12.0	6.0	3.0	0.0	0.0	0.0
72.5°	244.0	111.0	47.0	19.0	14.0	10.0	5.0	2.0	1.0	0.0	0.0
75°	85.0	89.0	35.0	14.0	11.0	7.0	4.0	2.0	1.0	0.0	0.0
77.5°	51.0	72.0	22.0	12.0	9.0	6.0	4.0	2.0	1.0	1.0	0.0
80°	29.0	48.0	14.0	10.0	8.0	5.0	3.0	2.0	1.0	1.0	0.0
82.5°	16.0	23.0	11.0	9.0	7.0	5.0	3.0	2.0	1.0	1.0	1.0
85°	13.0	12.0	9.0	8.0	6.0	4.0	3.0	1.0	0.0	0.0	0.0
87.5°	10.0	8.0	8.0	8.0	6.0	4.0	3.0	1.0	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)