

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: P453151

Luminaire Tested: **GALN-SA4A-830-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453151
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-830-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 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: 11778 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 121
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

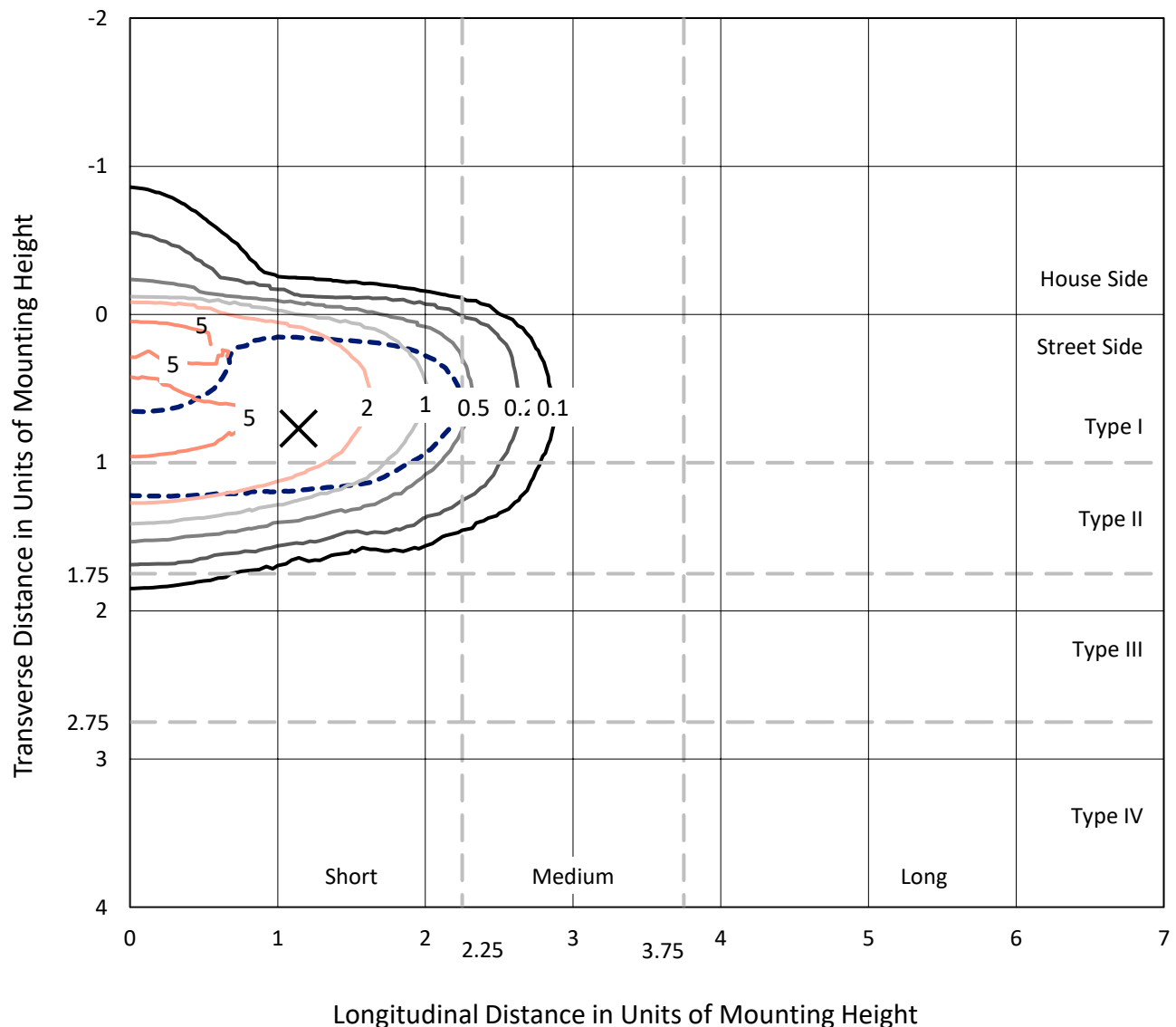


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Iso-Footcandle Lines of Horizontal Illumination

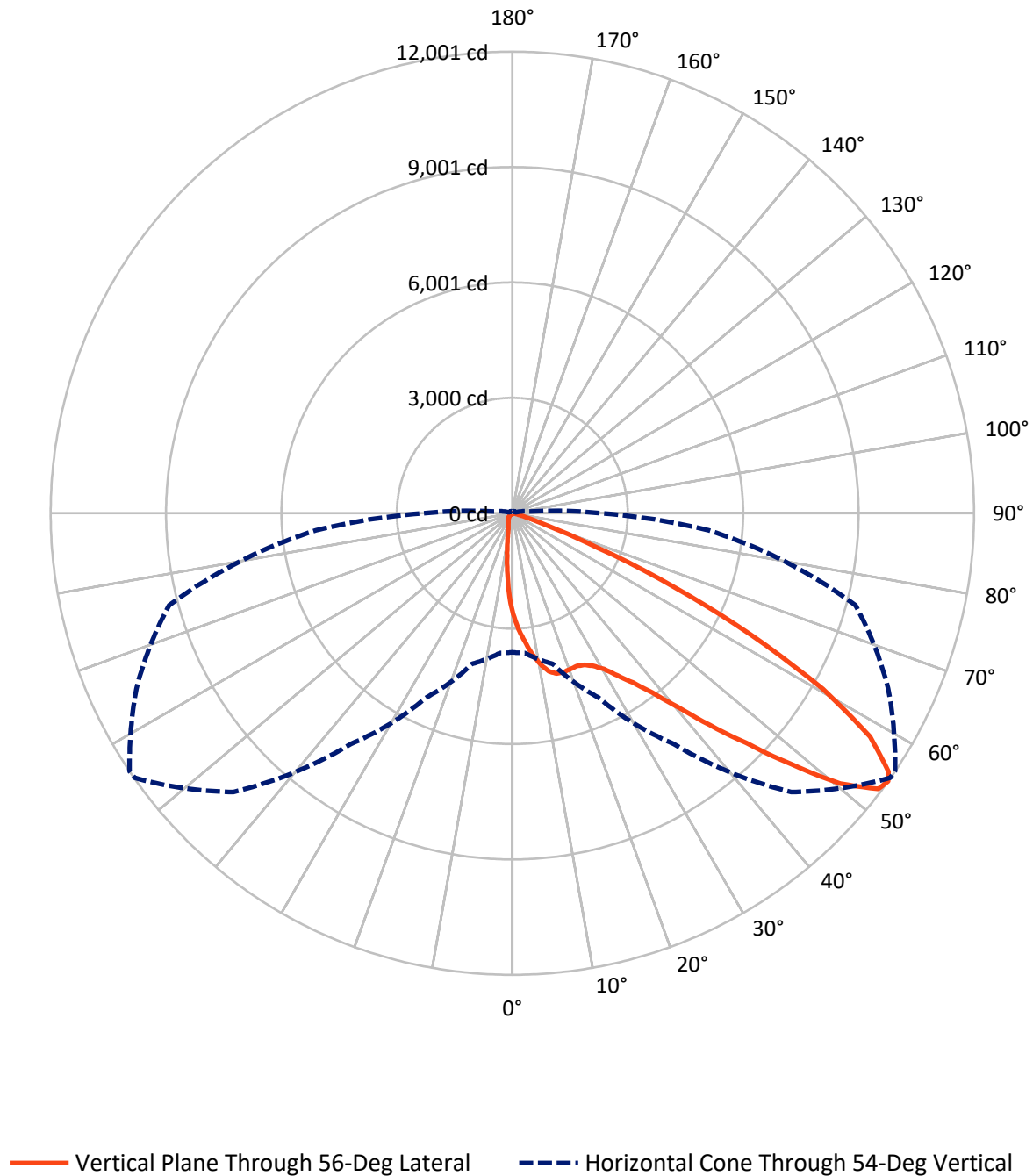
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	557.0	0.0	557.0
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	11221.0	0.0	11221.0
	% Fixture	95.3	0.0	95.3
Total	Lumens	11778.0	0.0	11778.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.2	2.0
10°-20°	625.1	5.3
20°-30°	1082.6	9.2
30°-40°	1868.7	15.9
40°-50°	3180.7	27.0
50°-60°	3147.7	26.7
60°-70°	1436.7	12.2
70°-80°	184.5	1.6
80°-90°	20.8	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°	11778.0	100.0
0°-180°	11778.0	100.0

Coefficient of Utilization



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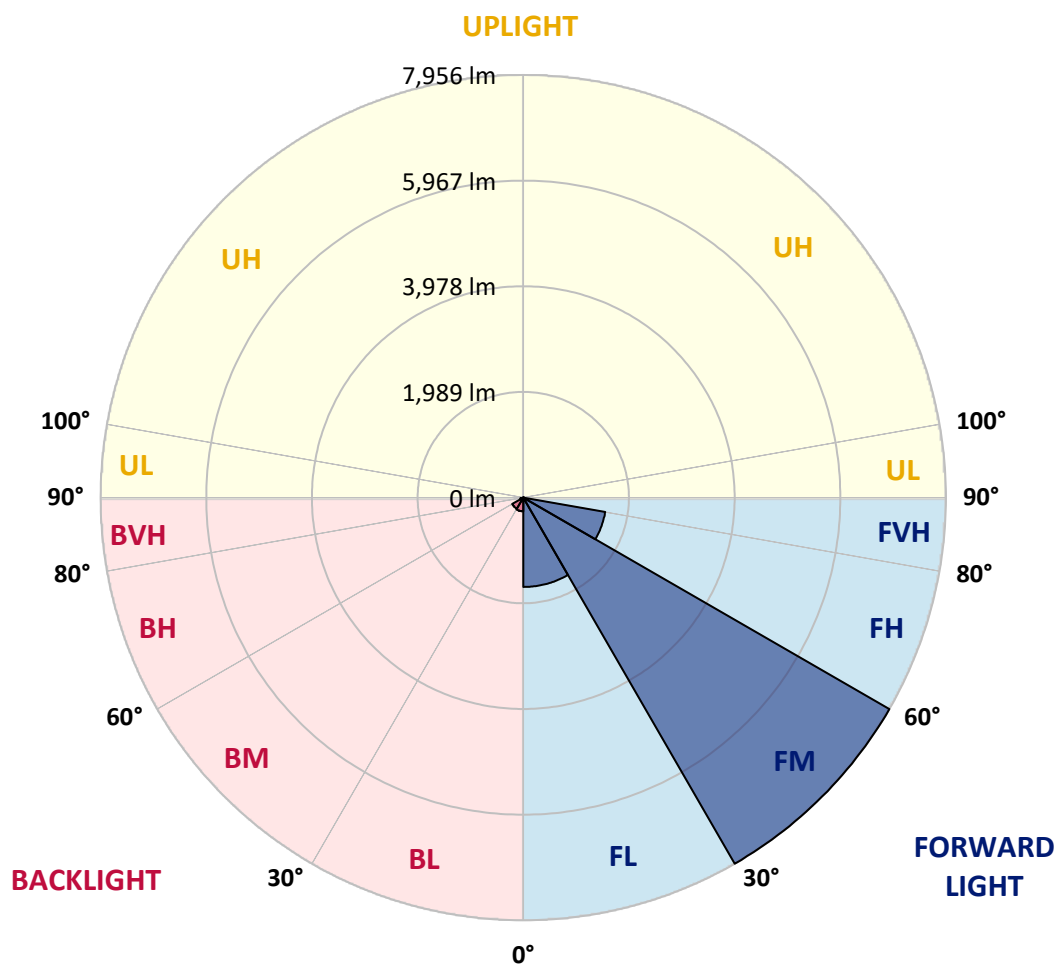
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1681.4	14.3			
FM	(30°-60°)	7955.7	67.5			
FH	(60°-80°)	1565.4	13.3			G1/1800
FVH	(80°-90°)	18.6	0.2			G1/100
BL	(0°-30°)	257.6	2.2	B1/500		
BM	(30°-60°)	241.4	2.0	B1/1000		
BH	(60°-80°)	55.8	0.5	B0/110		G0/110
BVH	(80°-90°)	2.2	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7
2.5°	3325.5	3302.5	3270.7	3246.1	3188.1	3104.6	3016.4	3016.4	2931.4	2813.0	2692.2
5°	3835.7	3820.6	3789.6	3726.0	3660.9	3544.1	3366.9	3335.9	3184.1	2969.6	2743.9
7.5°	4043.1	4050.3	4051.8	4035.2	4004.2	3888.9	3713.3	3691.9	3449.5	3161.9	2811.4
10°	3844.4	3879.4	3913.6	3982.7	4080.5	4108.3	4008.9	3986.7	3748.3	3356.5	2884.5
12.5°	3548.8	3567.9	3587.0	3695.8	3892.1	4117.0	4221.1	4220.3	4018.5	3550.4	2977.5
15°	3411.4	3428.1	3429.6	3478.1	3648.2	3975.6	4311.7	4323.6	4282.3	3789.6	3077.6
17.5°	3440.0	3453.5	3442.4	3454.3	3543.3	3819.8	4301.4	4341.1	4496.0	4019.3	3168.2
20°	3626.7	3652.9	3610.0	3576.7	3603.7	3778.5	4266.4	4322.0	4647.0	4243.4	3250.9
22.5°	3962.1	3976.4	3922.3	3830.9	3783.3	3865.1	4256.9	4311.7	4775.8	4426.9	3298.5
25°	4334.7	4330.0	4270.4	4167.9	4067.7	4039.9	4319.6	4368.9	4882.2	4592.2	3312.8
27.5°	4707.4	4721.7	4621.6	4494.5	4374.5	4302.2	4460.3	4496.8	5002.2	4780.5	3330.3
30°	5140.5	5117.4	5018.9	4873.5	4736.0	4635.1	4686.8	4697.1	5167.5	5030.0	3376.4
32.5°	5703.9	5640.3	5529.9	5275.6	5177.0	5006.2	5018.9	5031.6	5368.6	5277.2	3432.0
35°	6468.3	6465.2	6249.0	5906.5	5666.5	5454.4	5398.8	5409.1	5672.9	5644.3	3555.2
37.5°	7388.5	7401.2	7154.9	6810.0	6368.2	6031.3	5916.9	5918.4	6135.4	6151.3	3742.7
40°	8137.9	8171.2	8024.2	7791.4	7355.1	6828.3	6636.0	6618.5	6785.4	6765.5	4010.5
42.5°	8460.5	8491.5	8546.3	8627.4	8387.4	7952.7	7499.0	7522.8	7573.7	7434.6	4310.9
45°	8302.3	8351.6	8567.0	9067.6	9293.3	9147.0	8605.9	8522.5	8307.1	8161.7	4612.9
47.5°	7643.6	7763.6	8123.6	8957.1	9747.0	10241.3	9855.1	9744.6	9041.4	8692.5	4805.2
50°	6560.5	6567.7	7069.1	8134.7	9511.8	10931.8	11130.5	11047.8	9725.5	8990.5	4902.1
52.5°	4755.9	4912.4	5371.7	6605.8	8493.1	10826.9	11943.4	11909.2	10431.2	9143.1	5042.0
54°	3615.6	3645.8	4054.2	5278.8	7322.6	10250.8	11993.4	12001.4	10781.6	9235.2	5124.6
55°	2964.0	2891.7	3320.8	4496.8	6524.0	9741.4	11829.7	11867.9	10938.9	9282.9	5185.8
57.5°	1404.9	1405.7	1733.9	2372.0	4086.0	7564.1	10829.3	10964.4	10956.4	9364.8	5374.1
60°	711.2	716.0	788.3	1095.0	2018.4	5028.5	8953.9	9275.8	10113.3	9376.7	5436.1
62.5°	497.4	491.9	480.0	526.8	849.5	2555.5	6666.2	6945.9	8592.4	8923.0	5239.0
65°	425.9	414.0	380.6	373.5	429.1	1017.9	4152.0	4608.1	6560.5	7726.2	4678.0
67.5°	363.9	359.2	329.0	310.7	303.6	443.4	2142.3	2382.3	4484.1	5553.7	3543.3
70°	309.1	306.7	288.5	265.4	245.5	265.4	794.6	984.6	2499.1	2990.2	1671.9
72.5°	251.1	253.5	256.7	227.3	206.6	188.3	339.3	394.9	1045.7	1068.8	584.9
75°	220.1	217.7	217.7	197.9	172.4	139.9	186.7	201.0	320.2	297.2	135.9
77.5°	155.0	149.4	174.8	162.9	143.8	99.3	106.5	112.8	132.7	113.6	63.6
80°	107.3	107.3	112.0	146.2	129.5	72.3	65.2	69.9	78.7	67.5	36.6
82.5°	60.4	62.0	73.1	77.9	75.5	48.5	42.9	43.7	52.4	46.1	23.0
85°	7.2	11.9	42.1	41.3	31.0	21.5	23.8	24.6	32.6	28.6	13.5
87.5°	0.8	1.6	8.7	11.1	7.9	8.7	8.7	8.7	11.1	12.7	9.5
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°	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7	2616.7
2.5°	2627.1	2566.7	2422.8	2256.0	2149.5	1976.3	1830.0	1724.4	1698.1	1647.3	1662.4
5°	2623.9	2498.3	2205.1	1895.2	1564.6	1318.3	1134.7	990.1	926.5	884.4	855.0
7.5°	2625.5	2429.2	1958.8	1465.3	1070.4	828.8	658.8	570.5	511.7	487.1	490.3
10°	2630.2	2351.3	1672.7	1085.5	722.3	535.6	431.5	389.4	369.5	366.3	365.5
12.5°	2641.4	2266.3	1399.4	805.8	505.4	389.4	349.6	335.3	329.0	329.0	326.6
15°	2653.3	2172.5	1172.1	599.2	389.4	334.5	316.3	309.1	305.1	305.1	304.3
17.5°	2653.3	2064.5	959.9	464.9	335.3	307.5	293.2	283.7	280.5	280.5	279.7
20°	2636.6	1938.9	771.6	374.3	304.3	282.1	267.8	257.5	253.5	251.9	251.1
22.5°	2578.6	1771.2	614.3	321.8	278.9	259.8	241.6	229.6	226.5	224.9	225.7
25°	2475.3	1582.1	486.3	282.9	255.9	232.8	216.9	208.2	205.0	205.0	205.8
27.5°	2368.8	1384.3	385.4	253.5	228.1	207.4	194.7	189.1	188.3	190.7	191.5
30°	2270.3	1185.6	312.3	229.6	203.4	185.9	177.2	175.6	175.6	176.4	177.2
32.5°	2160.6	1011.6	261.4	209.0	183.6	168.5	163.7	163.7	165.3	165.3	166.9
35°	2091.5	862.2	229.6	189.1	168.5	155.7	152.6	153.4	155.7	158.9	160.5
37.5°	2054.1	743.0	209.0	173.2	154.2	145.4	142.2	143.8	149.4	155.0	155.7
40°	2057.3	653.2	192.3	159.7	143.0	133.5	131.1	135.9	141.4	147.0	147.8
42.5°	2092.3	586.4	176.4	143.8	133.5	120.0	119.2	124.0	126.3	131.9	132.7
45°	2133.6	538.0	159.7	127.1	116.0	104.1	104.9	108.9	112.0	120.8	122.4
47.5°	2146.3	504.6	140.7	108.1	95.4	91.4	92.2	94.6	100.9	108.9	109.7
50°	2160.6	483.9	122.4	91.4	81.1	80.3	81.1	82.6	86.6	89.8	89.0
52.5°	2221.8	483.1	107.3	79.5	69.1	70.7	71.5	70.7	67.5	62.8	61.2
54°	2279.0	485.5	100.1	73.9	63.6	66.0	65.2	61.2	53.2	48.5	46.1
55°	2325.1	487.9	96.2	69.9	60.4	61.2	62.0	54.0	43.7	38.9	37.3
57.5°	2415.7	482.3	86.6	61.2	53.2	50.1	49.3	35.8	23.8	20.7	19.1
60°	2370.4	435.5	78.7	52.4	45.3	40.5	33.4	19.9	11.9	8.7	8.7
62.5°	2192.4	369.5	69.9	42.9	37.3	31.0	17.5	11.1	5.6	3.2	2.4
65°	1961.2	310.7	62.8	34.2	29.4	19.9	9.5	7.2	2.4	0.0	0.0
67.5°	1458.2	230.4	53.2	27.0	22.2	12.7	6.4	4.0	0.8	0.0	0.0
70°	675.4	140.7	45.3	20.7	15.9	9.5	4.8	2.4	0.0	0.0	0.0
72.5°	193.9	88.2	37.3	15.1	11.1	7.9	4.0	1.6	0.8	0.0	0.0
75°	67.5	70.7	27.8	11.1	8.7	5.6	3.2	1.6	0.8	0.0	0.0
77.5°	40.5	57.2	17.5	9.5	7.2	4.8	3.2	1.6	0.8	0.8	0.0
80°	23.0	38.1	11.1	7.9	6.4	4.0	2.4	1.6	0.8	0.8	0.0
82.5°	12.7	18.3	8.7	7.2	5.6	4.0	2.4	1.6	0.8	0.8	0.8
85°	10.3	9.5	7.2	6.4	4.8	3.2	2.4	0.8	0.0	0.0	0.0
87.5°	7.9	6.4	6.4	6.4	4.8	3.2	2.4	0.8	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)