

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: P458451

Luminaire Tested: **GALN-SA9D-760-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458451  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-760-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 50500 lumens  
Efficiency: N/A  
Efficacy: 91.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

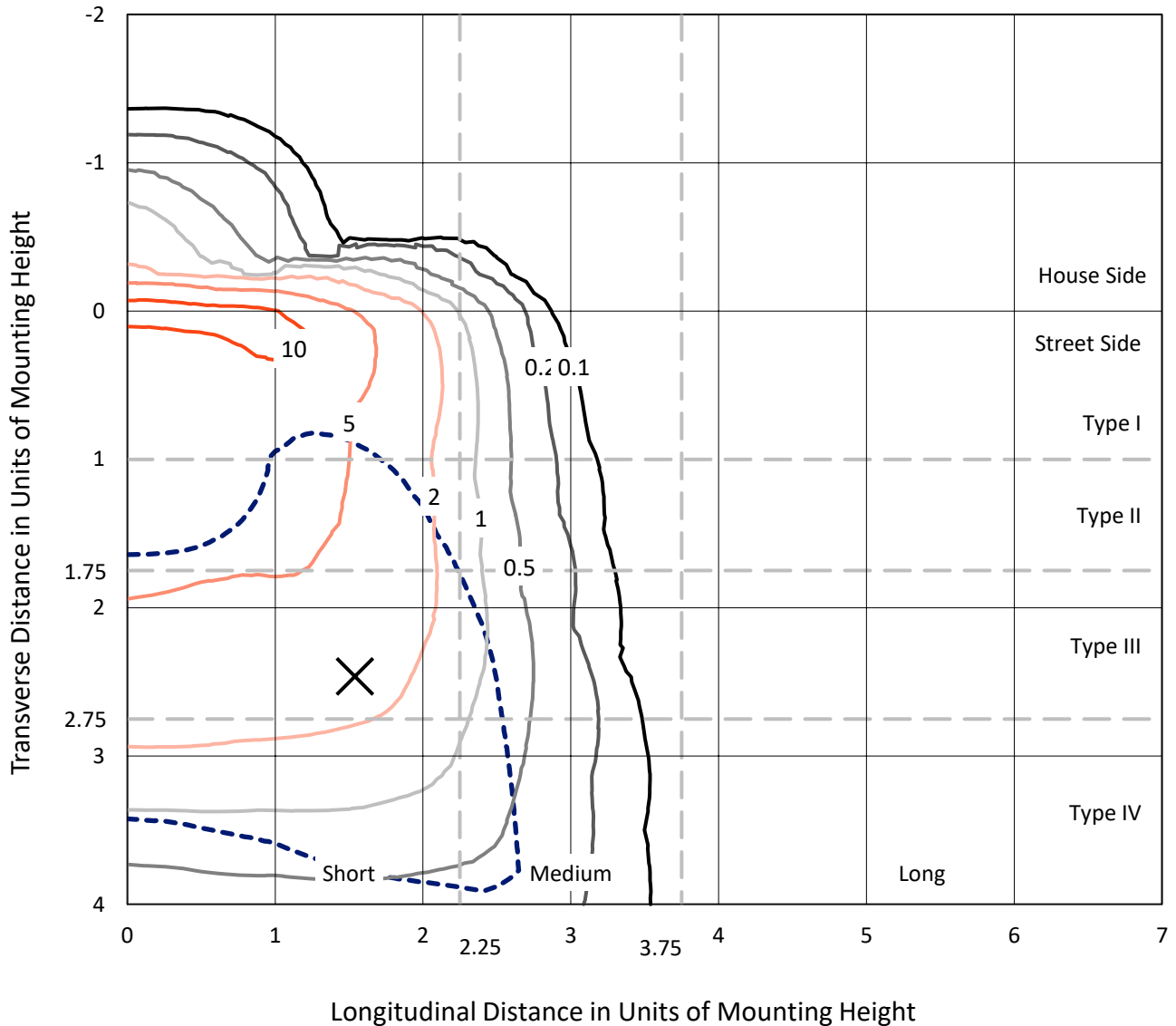
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

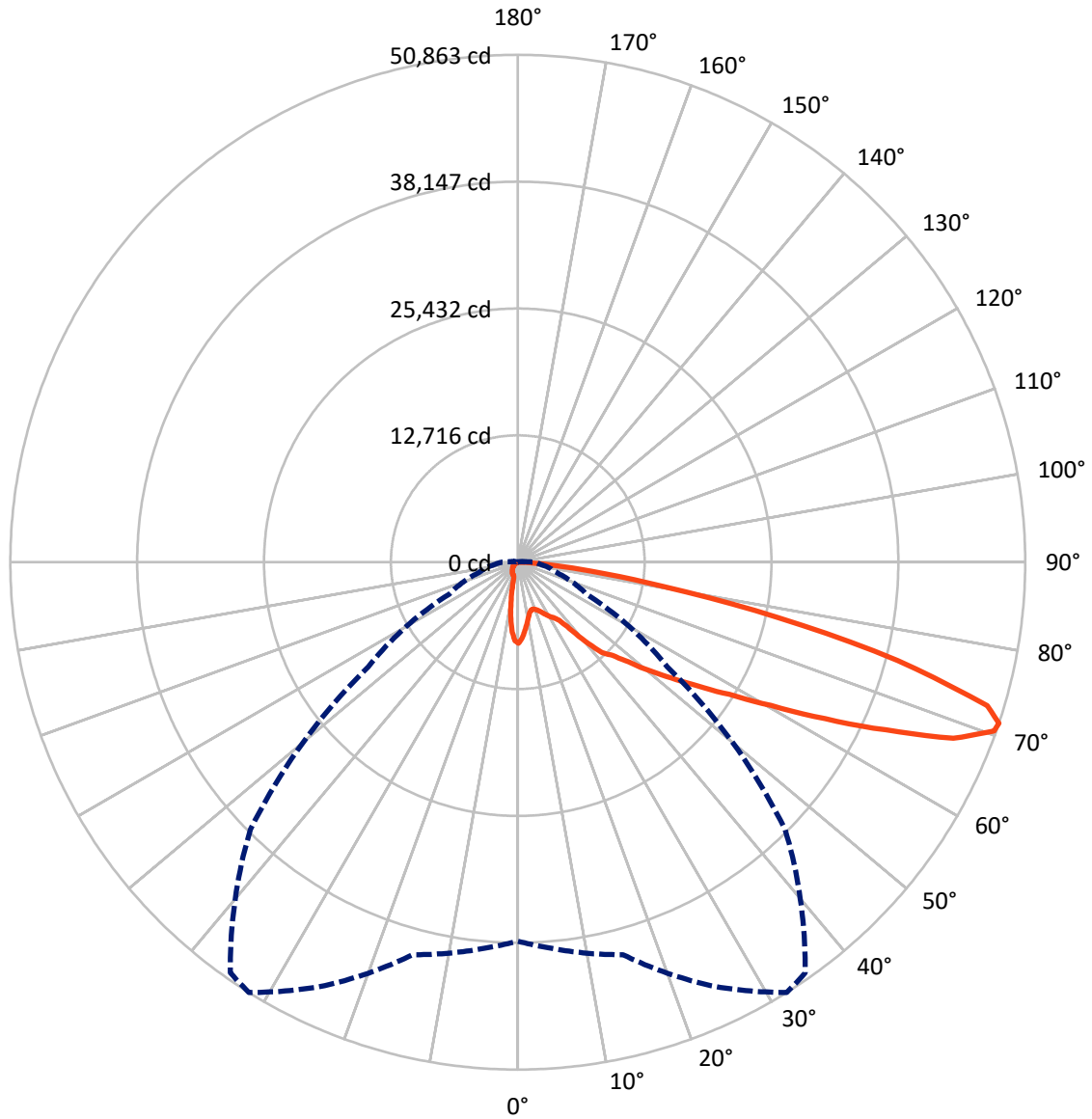
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4229.9	0.0	4229.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	46270.1	0.0	46270.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	50500.0	0.0	50500.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	660.4	1.3
10°-20°	1433.2	2.8
20°-30°	2229.6	4.4
30°-40°	3714.5	7.4
40°-50°	6909.6	13.7
50°-60°	11093.7	22.0
60°-70°	14921.5	29.5
70°-80°	8853.1	17.5
80°-90°	684.3	1.4
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°	50500.0	100.0
0°-180°	50500.0	100.0



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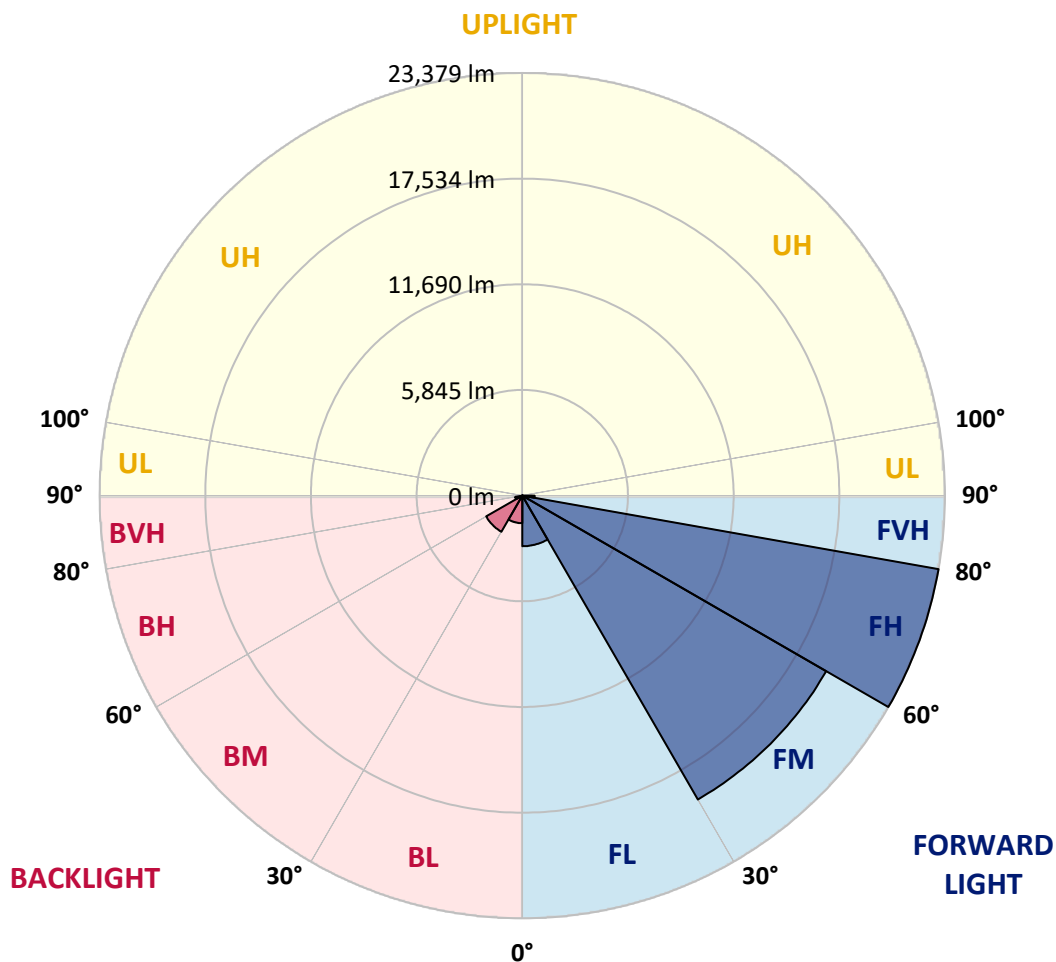
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2799.1	5.5			
FM	(30°-60°)	19410.3	38.4			
FH	(60°-80°)	23379.0	46.3			G5
FVH	(80°-90°)	681.7	1.3			G4/750
BL	(0°-30°)	1524.1	3.0	B3/2500		
BM	(30°-60°)	2307.5	4.6	B2/2500		
BH	(60°-80°)	395.6	0.8	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: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2
2.5°	7532.0	7609.5	7597.9	7625.0	7690.9	7718.0	7791.7	7873.1	7985.5	8063.0	8113.4
5°	6745.0	6803.2	6810.9	6946.6	7012.5	7086.2	7303.3	7539.7	7803.3	8012.6	8152.2
7.5°	5903.9	5934.9	5996.9	6175.2	6341.9	6415.5	6745.0	7155.9	7570.7	7962.3	8214.2
10°	5210.0	5244.9	5357.3	5547.2	5702.3	5799.2	6256.6	6772.2	7353.6	7935.1	8303.4
12.5°	4814.6	4833.9	4876.6	5047.2	5244.9	5349.5	5841.8	6431.1	7179.2	7946.7	8454.6
15°	4787.4	4779.7	4729.3	4799.1	4977.4	5085.9	5566.6	6198.5	7024.1	7985.5	8632.9
17.5°	4930.9	4911.5	4791.3	4791.3	4938.6	5027.8	5450.3	6074.4	6946.6	8074.7	8884.9
20°	5151.8	5120.8	4923.1	4907.6	5051.0	5144.1	5520.1	6082.2	6962.1	8241.4	9222.1
22.5°	5430.9	5396.0	5097.5	5105.3	5260.4	5353.4	5721.7	6221.7	7059.0	8446.8	9582.6
25°	5795.3	5756.5	5403.8	5388.3	5551.1	5632.5	6020.1	6469.8	7194.7	8702.7	10055.5
27.5°	6279.9	6198.5	5775.9	5752.7	5927.1	6031.8	6380.7	6803.2	7435.1	9055.4	10691.3
30°	6679.1	6590.0	6186.8	6124.8	6310.9	6392.3	6752.8	7252.9	7908.0	9671.8	11571.2
32.5°	7202.5	7070.7	6597.7	6434.9	6632.6	6737.3	7291.6	8090.2	8609.6	10323.0	12617.9
35°	8380.9	8299.5	7721.9	7152.1	7140.4	7272.2	8086.3	8935.2	9330.6	11338.7	14044.4
37.5°	10067.2	10009.0	9396.5	8632.9	8411.9	8349.9	9051.5	9865.6	10482.0	12734.2	15703.5
40°	12024.8	11889.1	11327.0	10679.7	10392.8	10210.6	10191.2	11249.5	11986.0	14629.8	17432.5
42.5°	13428.1	13180.0	12497.7	12451.2	12389.2	12199.2	11648.8	13273.0	13928.1	16668.8	19281.5
45°	14901.1	14525.1	13509.5	13335.0	13311.8	13300.1	13850.6	15668.7	16044.7	18878.4	21181.0
47.5°	16044.7	15746.2	14912.8	14835.2	14932.1	15195.7	16761.8	18211.6	18134.1	20847.6	22774.2
50°	17568.1	17343.3	16416.8	16564.1	17064.2	17494.5	20045.2	20983.3	19851.4	22398.2	23933.3
52.5°	19366.8	18952.0	18091.5	18490.7	19258.3	19975.4	23530.1	23410.0	21056.9	23565.0	24797.7
55°	20925.1	20630.5	20335.9	20750.7	21898.1	22793.6	26677.8	25228.0	21933.0	24503.1	25177.6
57.5°	23561.1	23491.4	23189.0	23611.5	25003.2	25933.5	29496.0	26639.0	22495.1	24991.6	24731.8
60°	27460.9	27348.4	26786.4	27325.2	29139.4	30600.8	32093.2	27906.7	22623.0	24801.6	23448.7
62.5°	32151.4	31767.6	31286.9	32081.6	34570.3	35213.8	34539.3	28658.7	22146.2	23289.8	20355.3
65°	36531.8	36136.4	36148.0	37822.6	40532.3	40970.3	37392.4	28546.3	20750.7	19502.5	15013.5
67.5°	39884.9	39819.0	40292.0	43559.8	47102.9	46800.5	39943.1	26863.9	16614.5	12641.1	7977.8
70°	40055.5	40183.4	41540.2	47056.4	50653.7	50173.1	39726.0	21836.1	10357.9	5814.7	3143.8
71°	37993.2	38853.8	40730.0	46947.8	50863.1	50239.0	37896.3	18289.1	7597.9	4054.8	2267.7
72.5°	32376.2	32829.8	36884.5	44183.9	49207.8	47874.3	33256.2	12819.5	4865.0	2480.9	1302.5
75°	17831.7	18948.1	24700.8	34663.3	39357.7	38187.0	21673.3	6089.9	2426.7	1356.8	538.8
77.5°	8489.5	8272.4	12051.9	20615.0	26685.6	26623.5	10920.0	2705.8	1414.9	918.7	271.4
80°	2426.7	2729.0	4613.0	9799.7	14815.8	14978.7	4194.3	1306.4	980.7	717.1	139.6
82.5°	732.7	748.2	1694.0	4333.9	7369.2	6946.6	1573.8	666.8	705.5	569.8	81.4
85°	127.9	158.9	500.1	1527.3	2810.4	2132.1	395.4	317.9	465.2	376.0	46.5
87.5°	7.8	11.6	166.7	174.4	248.1	143.4	69.8	46.5	100.8	100.8	27.1
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°	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2	8121.2
2.5°	8148.3	8171.6	8156.1	8121.2	8063.0	7993.3	7900.2	7822.7	7756.8	7721.9	7764.6
5°	8198.7	8229.7	8152.2	7977.8	7714.2	7427.3	7101.7	6849.7	6652.0	6590.0	6566.7
7.5°	8276.2	8295.6	8086.3	7698.7	7140.4	6462.1	5869.0	5368.9	4981.3	4865.0	4694.4
10°	8377.0	8365.4	7970.0	7249.0	6268.2	5248.7	4330.0	3647.8	3132.2	2946.1	2930.6
12.5°	8532.1	8470.1	7822.7	6636.5	5229.3	3895.8	2760.0	2159.2	1833.6	1725.0	1701.8
15°	8725.9	8578.6	7590.1	5919.4	4004.4	2515.8	1701.8	1519.6	1476.9	1469.2	1461.4
17.5°	8954.6	8722.0	7283.9	5039.4	2814.3	1632.0	1422.7	1418.8	1422.7	1414.9	1411.0
20°	9264.7	8873.2	6919.5	3996.6	1860.7	1376.1	1356.8	1356.8	1360.6	1356.8	1356.8
22.5°	9594.2	9051.5	6469.8	3050.8	1403.3	1306.4	1302.5	1310.2	1318.0	1314.1	1314.1
25°	10001.3	9284.1	5876.7	2089.4	1256.0	1248.2	1252.1	1267.6	1283.1	1287.0	1283.1
27.5°	10590.5	9571.0	5241.0	1438.2	1151.3	1159.1	1197.8	1236.6	1259.9	1263.7	1263.7
30°	11253.4	9888.9	4411.4	1166.8	1066.0	1066.0	1112.5	1186.2	1236.6	1244.3	1248.2
32.5°	12106.2	10257.1	3492.7	1050.5	984.6	976.9	1019.5	1108.7	1201.7	1228.8	1228.8
35°	13160.6	10691.3	2597.2	976.9	926.5	907.1	930.4	1004.0	1124.2	1201.7	1209.5
37.5°	14397.2	11102.2	1899.5	911.0	872.2	845.1	860.6	918.7	1015.6	1131.9	1162.9
40°	15540.7	11466.6	1418.8	856.7	817.9	798.6	810.2	837.3	918.7	1027.3	1046.6
42.5°	16789.0	11749.6	1128.1	798.6	763.7	755.9	755.9	767.5	821.8	883.8	887.7
45°	18033.3	11850.3	945.9	728.8	705.5	713.3	709.4	701.6	724.9	717.1	717.1
47.5°	18921.0	11730.2	783.0	662.9	662.9	674.5	655.1	628.0	616.4	569.8	573.7
50°	19529.6	11292.1	643.5	585.3	616.4	631.9	593.1	550.5	507.8	457.4	445.8
52.5°	19781.6	10513.0	527.2	484.6	546.6	566.0	519.4	469.1	403.2	360.5	348.9
55°	19618.8	9551.6	438.0	395.4	461.3	484.6	438.0	379.9	306.2	259.7	252.0
57.5°	18901.6	8404.2	372.1	314.0	368.3	383.8	352.8	290.7	217.1	170.6	170.6
60°	17661.2	7218.0	302.4	248.1	275.2	298.5	267.5	209.3	147.3	104.7	96.9
62.5°	15145.3	5861.2	244.2	193.8	193.8	213.2	186.1	151.2	93.0	54.3	50.4
65°	10935.5	4019.9	193.8	143.4	139.6	139.6	116.3	100.8	54.3	23.3	15.5
67.5°	5942.6	2267.7	155.1	108.5	96.9	93.0	73.7	58.1	23.3	3.9	0.0
70°	2337.5	872.2	120.2	73.7	62.0	58.1	38.8	27.1	15.5	0.0	0.0
71°	1585.5	600.9	104.7	62.0	50.4	42.6	31.0	23.3	11.6	0.0	0.0
72.5°	907.1	372.1	81.4	46.5	38.8	31.0	23.3	15.5	11.6	0.0	0.0
75°	395.4	189.9	50.4	34.9	27.1	19.4	15.5	11.6	3.9	0.0	0.0
77.5°	201.6	104.7	34.9	27.1	15.5	11.6	7.8	3.9	0.0	0.0	0.0
80°	112.4	54.3	23.3	15.5	11.6	7.8	3.9	3.9	0.0	0.0	0.0
82.5°	62.0	31.0	11.6	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	38.8	19.4	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.4	7.8	0.0	0.0	0.0	0.0	3.9	3.9	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)