

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: P299218

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299218  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-01-LED-E1-SL2-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

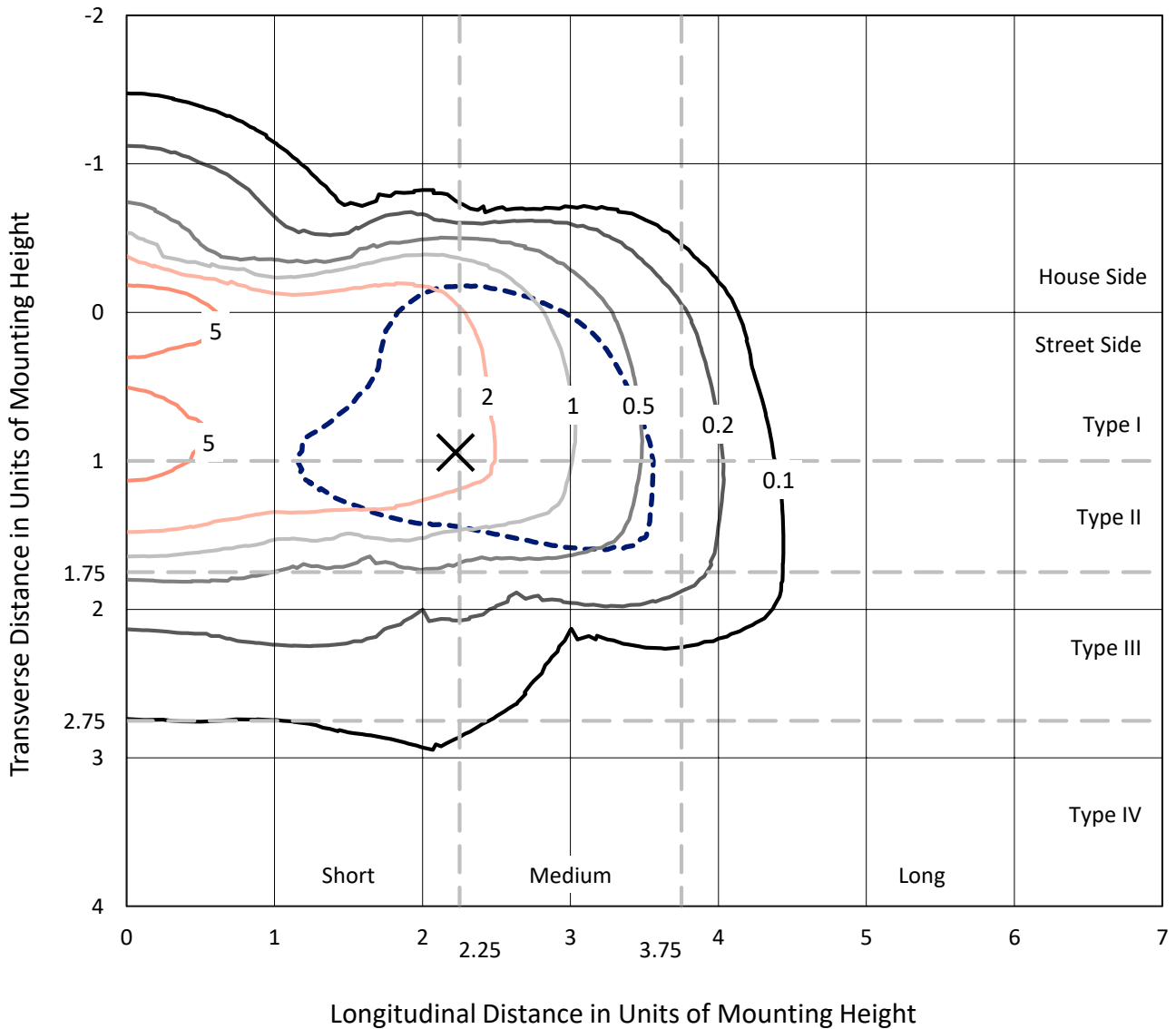
Lumens per Lamp: N/A  
Luminaire Lumens: 4008.1 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (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: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

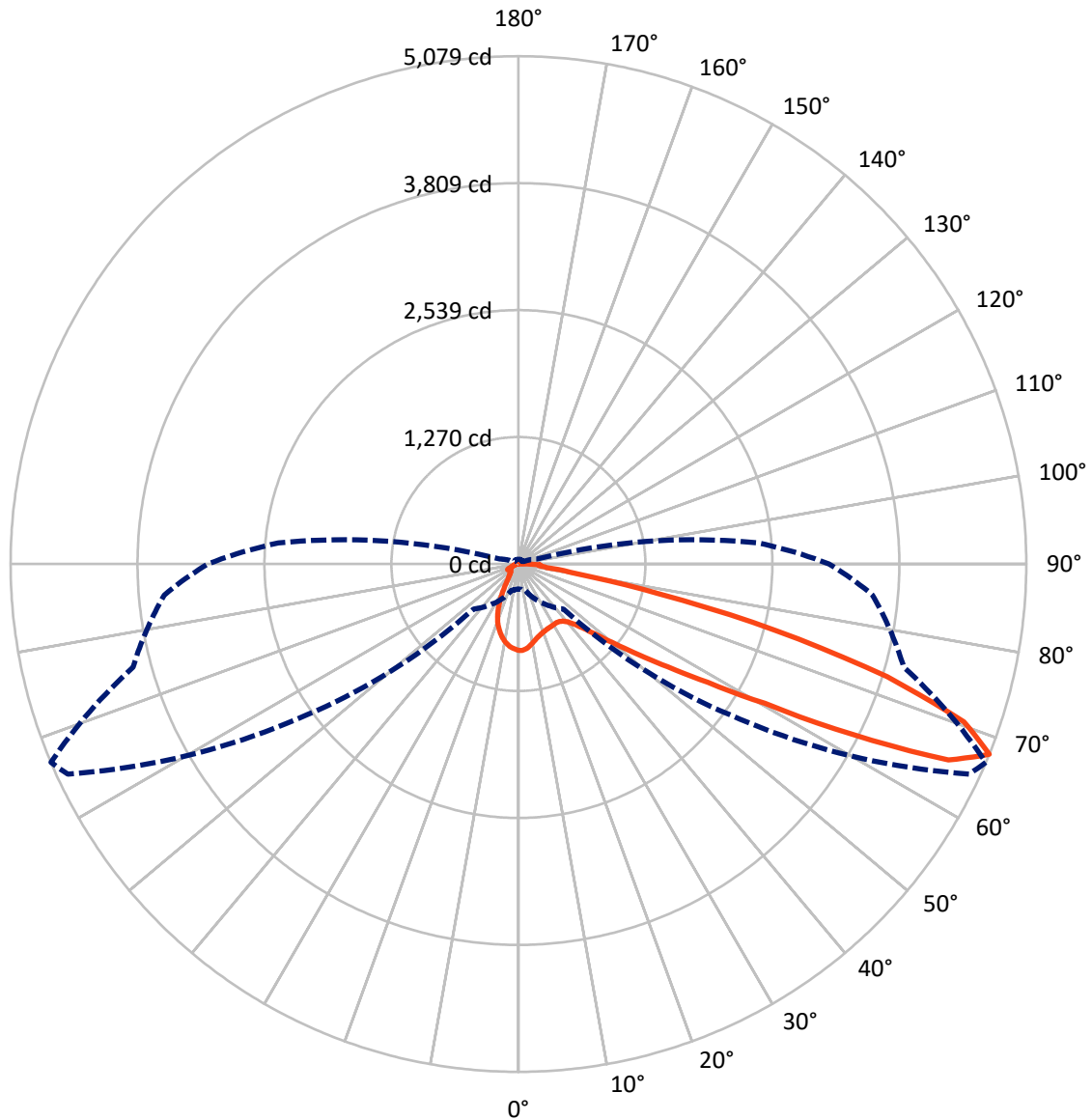
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	664.1	0.0	664.1
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	3344.0	0.0	3344.0
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	4008.1	0.0	4008.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.8	1.8
10°-20°	170.7	4.3
20°-30°	231.3	5.8
30°-40°	328.9	8.2
40°-50°	550.2	13.7
50°-60°	870.4	21.7
60°-70°	1108.9	27.7
70°-80°	580.8	14.5
80°-90°	93.2	2.3
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°	4008.1	100.0
0°-180°	4008.1	100.0



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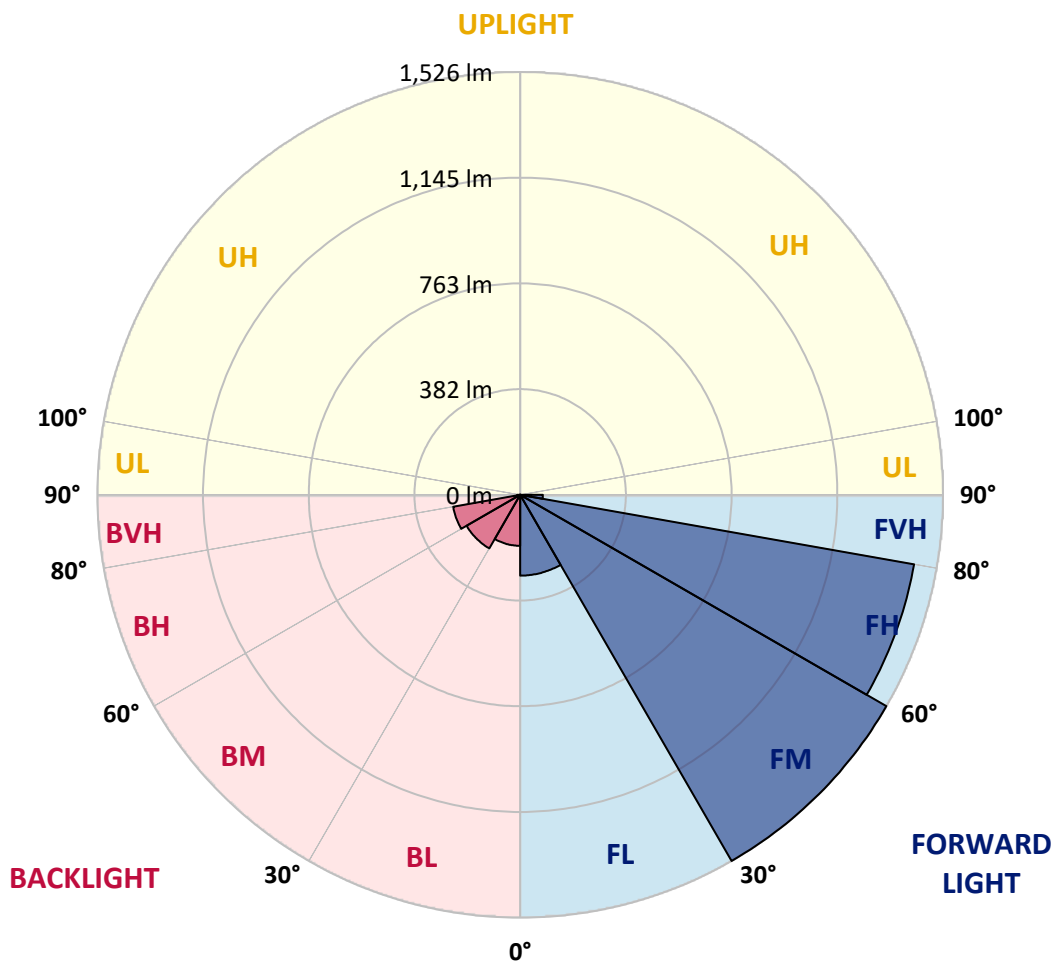
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	291.7	7.3			
FM	(30°-60°)	1526.4	38.1			
FH	(60°-80°)	1444.0	36.0			G1/1800
FVH	(80°-90°)	81.9	2.0			G1/100
BL	(0°-30°)	184.1	4.6	B1/500		
BM	(30°-60°)	223.2	5.6	B1/1000		
BH	(60°-80°)	245.6	6.1	B1/500		G1/500
BVH	(80°-90°)	11.2	0.3			G1/100
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°	65°	67°	75°	85°
0°	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5
2.5°	829.0	830.3	834.7	837.5	849.9	855.3	859.0	862.8	863.4	865.1	863.4
5°	742.0	745.0	753.1	762.2	786.3	805.2	825.2	846.0	849.7	863.2	866.9
7.5°	674.6	673.8	680.5	691.4	716.1	742.4	777.4	818.7	826.8	857.0	871.7
10°	625.4	624.8	631.9	643.2	666.7	691.6	731.1	787.7	799.1	847.3	876.2
12.5°	589.0	589.2	596.3	608.8	632.7	657.8	697.9	757.6	772.2	836.1	880.9
15°	564.9	566.5	572.2	585.5	608.8	633.9	673.2	735.1	751.5	827.2	886.3
17.5°	556.8	559.4	561.3	571.0	591.0	616.1	654.6	718.5	735.9	821.1	891.0
20°	564.3	567.3	563.5	566.9	579.5	601.7	640.0	705.4	723.2	814.1	891.6
22.5°	596.5	599.3	588.2	578.5	577.7	591.2	628.0	695.2	713.5	809.0	891.8
25°	653.3	655.0	636.4	613.9	592.0	587.4	619.5	688.0	707.6	804.5	888.1
27.5°	722.8	724.2	702.9	669.7	625.6	596.3	616.5	683.9	704.2	800.5	881.7
30°	807.4	813.9	785.3	743.4	679.1	622.6	622.4	681.7	700.5	793.8	869.3
32.5°	894.0	896.8	877.0	834.5	751.3	668.9	639.0	683.3	699.5	785.7	853.5
35°	981.8	985.3	972.5	938.3	849.9	736.7	671.4	692.6	705.6	782.9	842.4
37.5°	1095.4	1100.1	1082.4	1042.8	969.9	828.6	725.4	715.9	724.4	790.8	839.0
40°	1275.1	1272.9	1220.9	1162.0	1101.1	946.2	802.5	755.4	760.4	816.3	849.3
42.5°	1484.2	1478.9	1389.3	1296.8	1245.4	1088.5	904.5	824.0	823.0	866.5	885.5
45°	1651.0	1646.7	1566.0	1452.0	1410.9	1250.6	1036.3	926.2	918.9	946.2	952.3
47.5°	1741.3	1741.5	1695.1	1602.0	1601.0	1456.5	1205.7	1074.1	1061.4	1074.3	1067.7
50°	1709.7	1713.9	1708.9	1679.3	1774.5	1726.5	1426.9	1280.2	1254.7	1267.4	1242.3
52.5°	1556.7	1562.1	1591.3	1636.8	1847.5	2052.8	1751.8	1536.4	1506.7	1502.2	1474.3
55°	1285.5	1292.1	1351.8	1475.3	1786.8	2272.0	2264.5	1862.9	1815.7	1772.8	1760.9
57.5°	886.1	897.0	993.0	1176.4	1590.5	2338.3	2875.1	2328.4	2232.3	2082.5	2085.3
60°	499.5	512.1	625.4	792.0	1194.4	2266.3	3339.6	3033.4	2830.6	2445.2	2465.7
62.5°	317.6	331.3	417.2	550.3	716.7	1878.9	3529.9	4013.6	3756.0	2892.3	2912.4
65°	257.1	263.1	303.6	454.2	520.4	1132.0	3385.4	4821.0	4724.9	3459.8	3365.7
67.5°	251.0	253.0	273.9	381.3	499.1	636.3	2700.4	4972.0	5078.5	3989.7	3554.4
70°	248.1	255.0	308.7	363.9	477.9	536.6	1622.7	4558.1	4726.3	4128.2	3303.2
72.5°	120.4	120.0	155.4	329.1	538.4	556.6	833.7	3688.0	3856.8	3576.6	2714.4
75°	97.0	88.7	84.8	120.6	517.7	574.8	531.3	2537.7	2659.8	2398.0	1668.6
77.5°	92.1	82.2	75.3	75.5	218.8	609.6	450.1	1404.5	1440.1	1083.1	457.2
80°	76.3	67.2	62.3	70.2	105.9	580.5	486.6	635.7	583.3	266.0	152.2
82.5°	53.0	48.2	46.8	58.9	84.8	413.7	565.9	341.5	286.4	133.2	93.9
85°	33.8	28.9	32.0	42.9	66.0	190.9	582.9	266.2	211.7	84.6	53.0
87.5°	15.6	12.6	15.8	23.7	43.1	65.8	554.6	299.1	218.0	44.7	33.4
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°	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5	864.5
2.5°	864.9	861.2	858.2	852.7	846.6	840.6	835.3	828.6	826.6	824.8	827.6
5°	867.7	864.0	853.1	836.1	817.3	799.7	782.1	767.1	757.8	752.7	755.6
7.5°	871.9	866.5	844.0	812.8	779.0	748.1	716.3	690.8	672.0	663.1	665.7
10°	875.6	865.3	828.6	781.7	732.3	686.5	636.3	594.7	563.9	547.7	551.7
12.5°	877.2	860.8	807.0	743.0	675.2	608.0	534.1	472.0	427.7	411.5	408.2
15°	878.8	855.6	783.3	698.9	606.2	511.1	407.6	333.2	296.5	288.4	286.6
17.5°	879.2	846.8	756.4	651.1	525.4	395.9	278.7	231.5	231.7	244.7	246.3
20°	875.0	833.5	723.8	591.6	428.5	273.8	191.3	183.2	213.1	245.7	249.6
22.5°	865.5	815.9	686.9	522.2	317.6	180.3	148.0	156.9	195.5	235.4	240.0
25°	853.5	794.6	643.2	441.8	210.3	128.9	124.1	135.0	161.1	187.8	190.3
27.5°	837.1	769.3	594.2	349.7	136.6	106.1	109.3	116.6	127.3	139.1	140.3
30°	815.9	739.0	541.8	255.0	103.2	95.5	100.0	104.0	108.5	115.2	115.8
32.5°	791.6	710.0	488.0	176.1	91.5	89.9	93.5	95.5	99.0	103.2	103.6
35°	771.3	682.3	432.3	124.5	86.6	85.8	88.2	88.9	92.3	96.9	97.2
37.5°	759.6	659.8	374.8	100.4	83.2	82.0	83.4	83.4	88.2	94.9	95.9
40°	760.4	647.3	317.2	90.7	80.4	78.9	79.1	79.1	85.2	92.5	93.1
42.5°	781.9	650.5	266.2	87.0	78.3	76.5	75.5	76.1	81.2	86.0	86.4
45°	832.5	672.8	218.4	84.6	76.1	75.5	73.3	73.1	75.1	77.3	77.3
47.5°	915.5	716.9	186.0	83.0	74.3	74.1	71.6	69.0	68.8	69.6	69.6
50°	1050.5	792.8	164.3	81.2	73.1	71.6	68.6	64.6	63.2	63.8	63.8
52.5°	1252.9	928.2	155.9	78.9	70.6	68.0	64.6	60.7	59.5	59.7	59.7
55°	1518.4	1136.1	154.8	76.1	67.8	63.6	60.9	57.9	56.5	56.9	56.9
57.5°	1842.7	1423.7	175.9	71.7	64.0	59.3	57.7	55.7	54.8	55.3	55.1
60°	2237.1	1800.0	260.9	67.2	60.3	55.3	55.3	53.8	53.0	53.6	53.4
62.5°	2691.3	2232.3	366.8	63.8	56.3	52.2	53.0	52.2	51.4	51.8	51.6
65°	3094.1	2514.0	343.5	61.3	52.4	49.2	50.6	50.2	49.6	50.0	49.8
67.5°	3105.8	2409.6	192.9	58.5	48.6	46.3	48.2	48.0	47.6	48.0	47.8
70°	2771.7	2034.7	108.7	53.4	44.7	42.7	45.5	45.3	44.9	45.7	45.5
72.5°	2220.7	1476.5	79.5	47.0	40.7	38.9	42.1	41.9	41.9	43.1	42.5
75°	1277.8	759.8	63.4	40.3	36.6	35.2	37.9	38.1	38.5	40.1	38.9
77.5°	364.3	236.8	51.8	34.2	31.4	30.8	33.6	34.0	34.2	36.0	34.4
80°	135.4	109.1	42.7	28.7	25.7	25.9	28.5	29.1	29.3	31.0	29.1
82.5°	86.4	71.9	34.6	22.1	20.2	20.0	23.1	23.9	23.9	24.1	22.9
85°	50.4	43.1	26.1	16.0	14.2	13.6	17.2	18.6	18.0	17.6	16.8
87.5°	33.8	29.6	16.0	8.9	7.7	7.3	10.1	11.1	10.7	10.1	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

(END OF REPORT)