

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: P651170

Luminaire Tested: **GALN-SA1D-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA1D-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6647.3 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

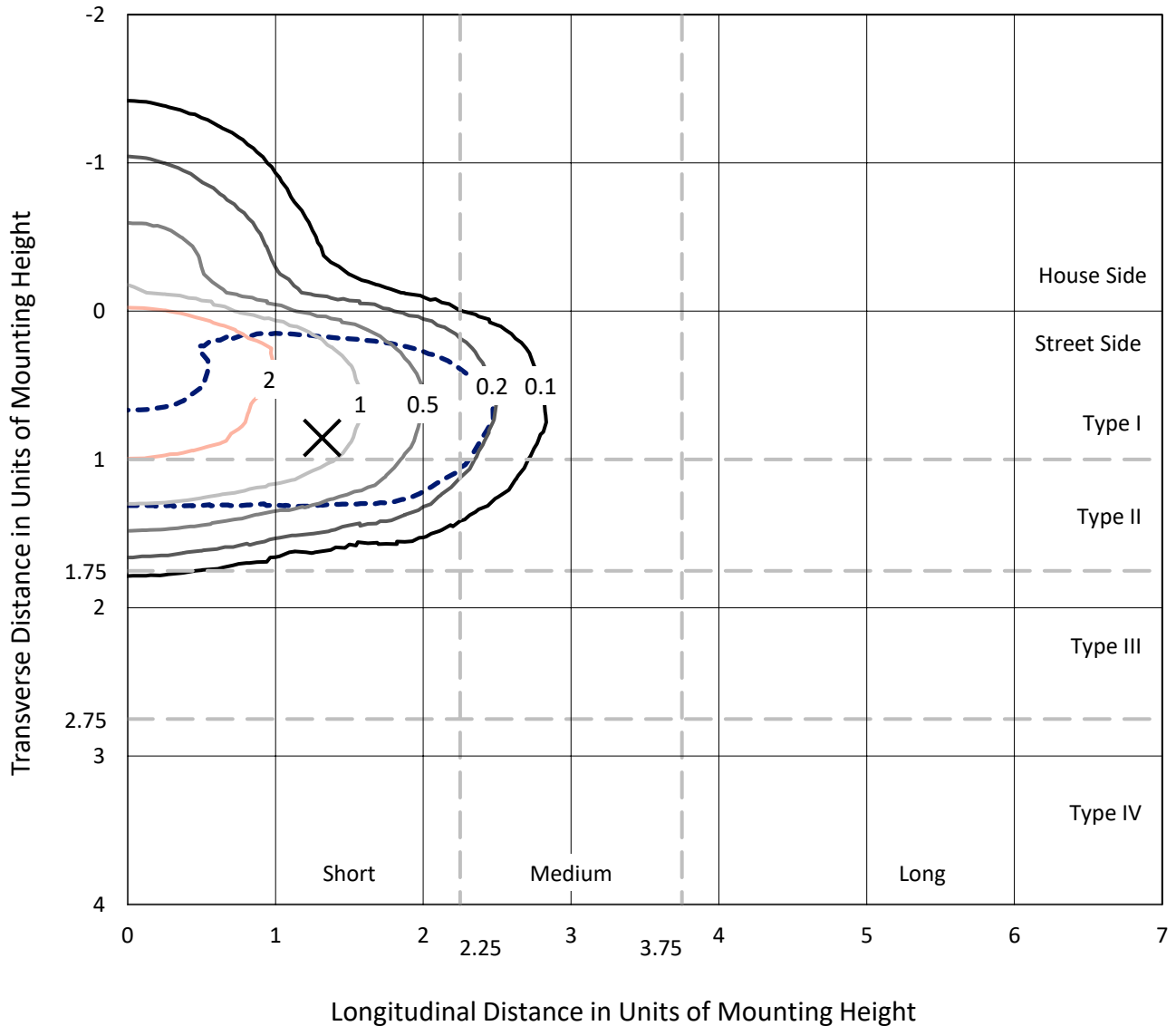
Input Watts (W): 65
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

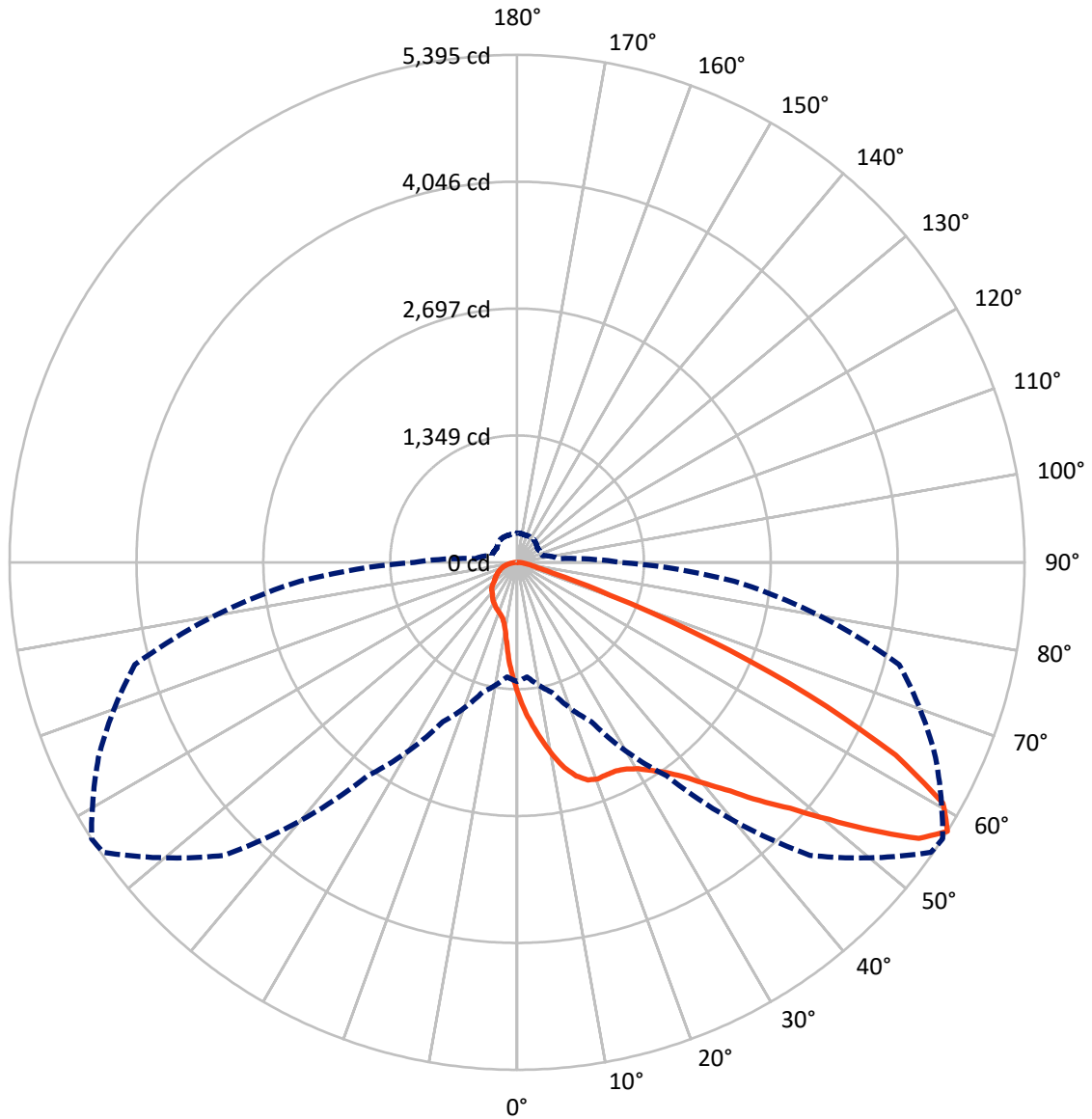
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1010.9	0.0	1010.9
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	5636.4	0.0	5636.4
	% Fixture	84.8	0.0	84.8
Total	Lumens	6647.3	0.0	6647.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	2.0
10°-20°	395.6	6.0
20°-30°	656.8	9.9
30°-40°	989.4	14.9
40°-50°	1485.4	22.3
50°-60°	1665.0	25.0
60°-70°	974.4	14.7
70°-80°	288.2	4.3
80°-90°	58.3	0.9
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°	6647.3	100.0
0°-180°	6647.3	100.0

Coefficient of Utilization



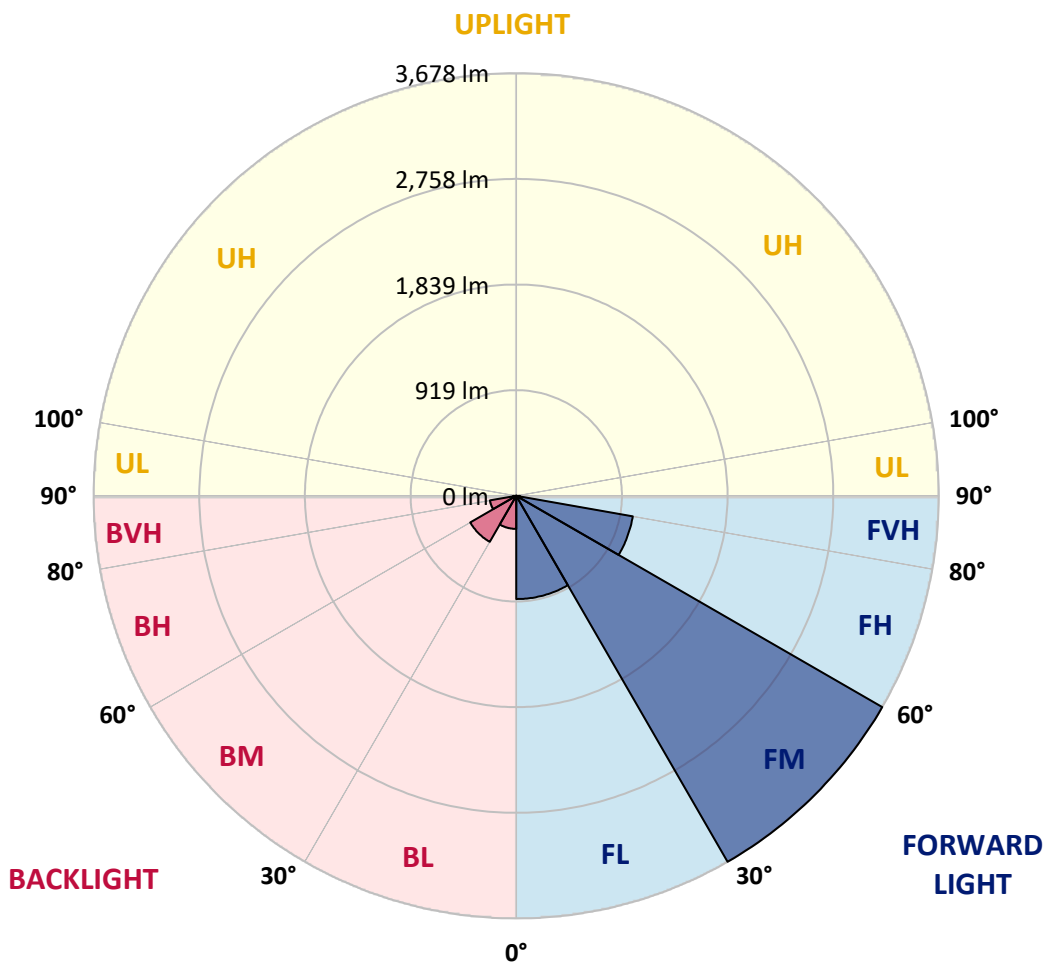
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	898.6	13.5			
FM (30°-60°)	3677.6	55.3			
FH (60°-80°)	1030.1	15.5			G1/1800
FVH (80°-90°)	30.2	0.5			G1/100
BL (0°-30°)	288.0	4.3	B1/500		
BM (30°-60°)	462.2	7.0	B1/1000		
BH (60°-80°)	232.6	3.5	B1/500		G1/500
BVH (80°-90°)	28.0	0.4			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°	57°	65°	75°	85°
0°	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5
2.5°	1735.2	1716.3	1701.4	1688.3	1671.2	1625.0	1578.8	1578.1	1541.3	1484.5	1426.3
5°	2018.0	1992.5	1995.8	1955.1	1914.3	1847.3	1749.4	1744.4	1666.1	1559.9	1451.8
7.5°	2202.1	2202.5	2192.3	2169.0	2125.0	2048.9	1937.9	1912.9	1804.0	1642.8	1480.9
10°	2192.7	2202.5	2219.6	2239.6	2253.0	2215.6	2114.4	2083.8	1942.3	1743.3	1513.3
12.5°	2066.8	2082.1	2106.5	2156.7	2237.7	2299.6	2265.1	2240.3	2102.4	1843.3	1549.0
15°	1988.1	1997.3	2010.7	2044.6	2131.9	2280.0	2369.5	2356.4	2253.4	1956.5	1589.0
17.5°	1964.2	1973.2	1977.6	1998.4	2060.5	2212.3	2410.6	2433.9	2387.3	2060.5	1629.4
20°	1988.1	1992.5	1992.5	2004.9	2053.6	2172.6	2408.8	2455.7	2497.2	2185.3	1667.2
22.5°	2051.1	2053.0	2050.4	2054.7	2091.1	2183.6	2391.7	2449.9	2586.0	2291.2	1696.7
25°	2153.4	2156.2	2139.5	2129.3	2155.9	2231.6	2401.1	2454.6	2655.5	2392.4	1716.3
27.5°	2269.4	2273.1	2252.7	2229.1	2241.4	2290.9	2438.2	2486.2	2707.5	2492.1	1728.8
30°	2411.7	2413.2	2378.9	2350.6	2342.5	2379.3	2501.6	2546.3	2772.3	2609.6	1747.3
32.5°	2557.2	2568.2	2524.1	2484.1	2470.6	2482.0	2595.1	2638.4	2849.4	2735.9	1777.1
35°	2755.2	2757.0	2704.2	2655.5	2611.1	2625.7	2714.8	2746.1	2956.0	2881.8	1819.3
37.5°	3002.3	3019.0	2946.2	2855.3	2800.7	2779.6	2859.7	2893.8	3105.6	3060.8	1883.0
40°	3276.6	3282.8	3220.6	3163.8	3064.1	3003.0	3058.3	3095.4	3290.1	3274.4	1956.8
42.5°	3449.1	3462.6	3467.3	3461.5	3386.5	3283.9	3305.0	3322.5	3508.4	3474.9	2032.5
45°	3507.3	3527.3	3595.0	3738.3	3746.3	3645.2	3596.1	3612.9	3746.3	3677.2	2104.9
47.5°	3410.8	3445.1	3569.9	3863.9	4084.0	4091.6	3943.5	3906.8	3963.2	3845.0	2157.3
50°	3161.7	3168.9	3360.0	3785.7	4242.3	4518.4	4365.3	4296.9	4169.2	3969.0	2193.4
52.5°	2775.9	2784.3	2944.4	3422.1	4144.8	4816.8	4858.7	4736.4	4378.4	4065.5	2217.0
55°	2060.5	2109.0	2285.1	2746.8	3682.7	4788.8	5251.0	5181.4	4631.3	4141.8	2254.1
57.5°	1267.0	1222.6	1431.5	1868.8	2769.7	4403.9	5372.1	5394.7	4909.6	4205.9	2316.4
60°	582.9	591.6	677.8	963.9	1688.3	3445.1	5059.9	5202.5	5063.6	4203.7	2332.0
62.5°	401.7	393.7	371.9	423.2	769.9	2178.9	4274.0	4515.6	4755.0	4073.1	2269.8
65°	359.1	351.1	308.9	294.8	353.6	949.7	3107.1	3411.9	4003.6	3743.5	2114.8
67.5°	335.5	324.5	280.9	253.2	252.6	378.0	1832.0	2199.2	2969.5	3164.9	1832.5
70°	310.7	302.0	258.7	228.2	215.0	237.6	805.3	1054.1	1928.2	2280.7	1427.4
72.5°	286.0	275.8	236.9	204.1	187.0	178.0	308.6	401.3	1089.4	1367.4	875.1
75°	249.9	244.9	211.8	184.9	166.3	143.7	195.8	223.5	521.1	628.1	439.2
77.5°	218.7	213.2	188.1	161.6	148.1	116.8	139.0	151.7	219.8	254.7	198.3
80°	160.1	165.6	158.6	142.6	132.1	91.7	93.5	104.0	130.6	144.5	121.2
82.5°	101.5	111.7	122.3	109.9	100.1	72.4	64.8	68.8	89.1	94.6	53.8
85°	42.6	43.3	71.0	66.9	57.1	43.0	38.9	41.1	47.7	49.9	25.1
87.5°	16.4	16.0	25.1	23.3	17.8	12.4	12.4	13.8	18.9	17.5	8.0
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°	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5	1396.5
2.5°	1401.3	1375.4	1324.1	1260.4	1213.8	1161.4	1115.3	1082.1	1069.8	1063.9	1053.0
5°	1400.2	1349.2	1243.0	1131.6	1042.1	950.4	872.9	822.7	818.3	784.8	781.5
7.5°	1400.5	1322.6	1153.4	989.7	853.3	759.4	695.3	678.6	658.6	653.5	656.1
10°	1401.6	1288.8	1057.4	849.2	717.2	655.6	631.7	625.1	625.9	628.1	628.4
12.5°	1403.0	1256.0	957.7	742.7	640.8	615.3	612.8	618.6	624.8	629.5	630.6
15°	1404.9	1218.6	860.5	656.7	602.6	600.4	608.7	618.6	627.3	634.2	635.3
17.5°	1402.7	1175.0	779.0	604.0	581.5	592.0	605.9	618.2	626.2	632.8	633.5
20°	1397.6	1126.2	700.5	566.9	568.3	585.4	600.4	612.0	620.7	624.0	626.5
22.5°	1378.0	1068.0	632.0	538.2	552.7	576.3	594.2	601.1	591.3	584.3	586.2
25°	1344.5	992.3	568.3	514.9	538.5	563.6	581.8	565.1	557.1	554.1	555.6
27.5°	1302.6	909.3	520.3	490.5	520.3	549.4	544.4	541.4	537.8	533.0	534.1
30°	1257.5	828.1	479.5	471.5	500.6	517.4	519.6	524.4	520.3	513.0	516.0
32.5°	1215.7	751.8	448.7	455.6	486.9	484.3	500.6	506.1	487.6	463.2	464.3
35°	1180.0	680.8	425.4	439.9	463.2	464.3	480.6	461.7	441.7	430.1	430.8
37.5°	1153.1	625.5	410.1	426.5	433.0	446.8	438.1	428.2	425.7	417.7	418.1
40°	1137.1	577.1	400.2	415.9	414.8	424.3	396.3	406.0	409.7	407.1	407.5
42.5°	1121.1	542.9	390.1	401.3	401.0	382.4	376.3	384.6	394.1	395.2	394.4
45°	1108.4	516.3	379.5	379.1	386.4	357.3	355.5	360.6	374.1	380.6	380.2
47.5°	1094.1	494.1	363.5	353.3	355.5	341.7	338.8	340.9	357.3	367.9	370.8
50°	1076.3	472.0	343.5	329.7	320.6	327.1	327.8	328.2	344.6	356.6	359.1
52.5°	1062.1	455.2	320.6	310.4	299.5	314.0	319.5	320.2	330.0	339.8	341.7
55°	1070.5	445.7	298.0	290.7	280.9	300.6	311.1	312.6	314.7	322.0	323.1
57.5°	1095.6	447.9	279.8	270.4	263.1	284.5	302.3	303.4	302.0	310.7	312.2
60°	1103.2	446.8	266.3	247.8	243.4	267.4	289.6	291.8	291.5	304.2	306.7
62.5°	1071.2	433.0	252.9	228.8	226.0	249.9	271.8	280.6	282.3	300.6	303.9
65°	995.9	404.6	235.1	208.8	208.8	231.4	254.7	266.7	271.8	296.2	299.8
67.5°	896.6	371.1	216.9	191.7	191.0	213.6	236.5	248.9	256.9	290.0	292.2
70°	744.1	326.1	194.3	173.2	173.2	193.6	214.3	229.3	240.9	278.4	278.4
72.5°	509.8	271.1	167.0	152.1	152.5	171.4	192.5	209.2	223.0	255.1	255.8
75°	322.4	211.8	137.2	129.5	131.0	148.9	170.6	188.1	215.8	252.1	253.2
77.5°	171.4	148.9	109.2	107.3	109.2	125.6	150.0	173.9	216.5	218.7	215.0
80°	111.0	105.5	86.2	82.6	83.3	101.2	133.6	165.2	173.9	176.1	168.1
82.5°	60.4	66.9	61.1	57.5	57.5	79.0	113.9	131.4	124.8	103.7	99.0
85°	25.8	31.3	31.6	27.7	26.6	48.8	76.4	71.7	66.6	63.7	62.9
87.5°	7.3	10.2	10.2	7.7	5.8	13.5	15.3	4.4	0.0	0.3	0.8
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)