

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: P454306

Luminaire Tested: **GALN-SA5B-827-U-T4W-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454306  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5B-827-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15154 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G3

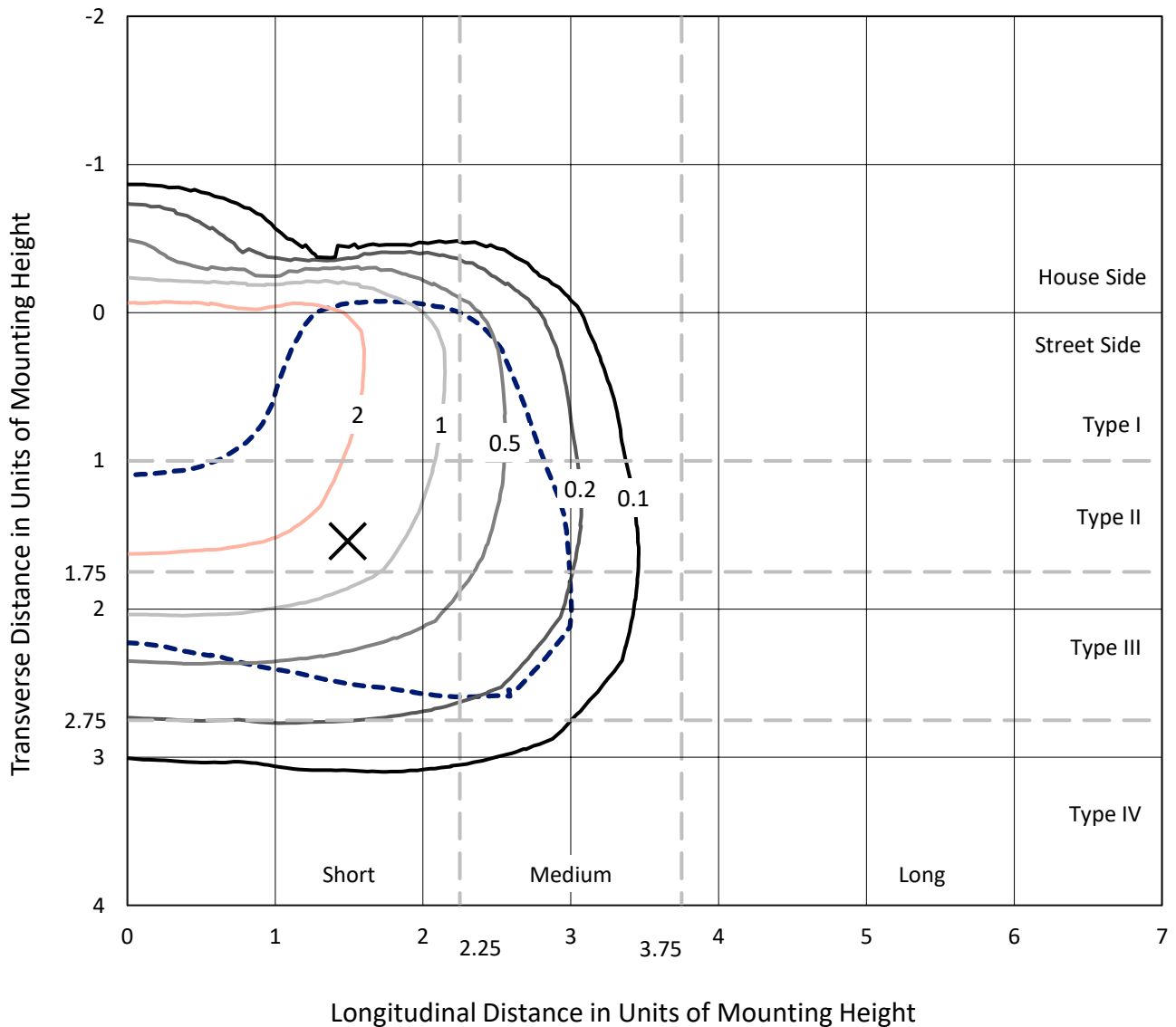
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

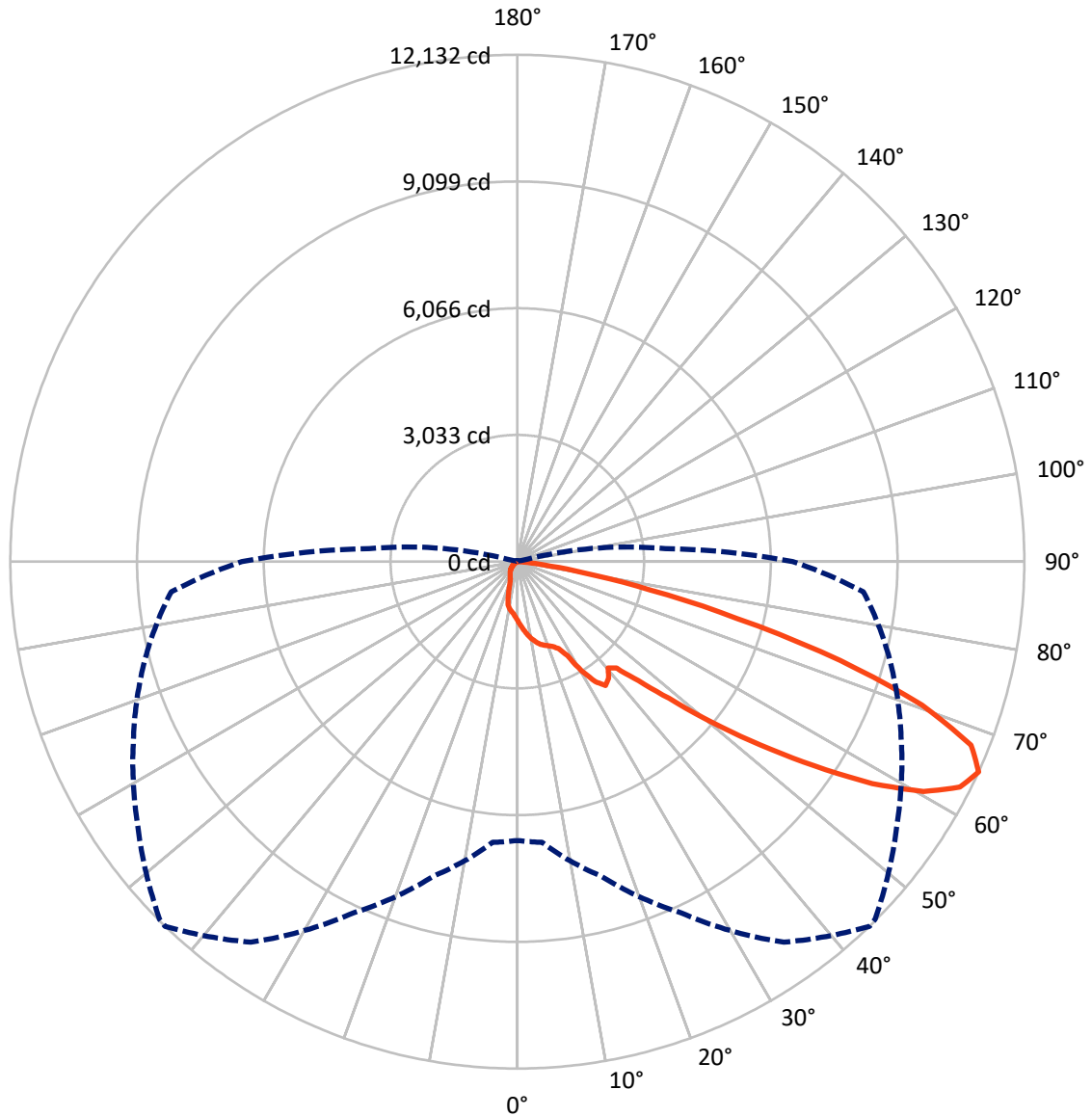
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1396.2	0.0	1396.2
	% Fixture	9.2	0.0	9.2
<b>Street Side</b>	Lumens	13757.8	0.0	13757.8
	% Fixture	90.8	0.0	90.8
<b>Total</b>	Lumens	15154.0	0.0	15154.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	0.9
10°-20°	422.2	2.8
20°-30°	715.9	4.7
30°-40°	1190.3	7.9
40°-50°	2078.2	13.7
50°-60°	4060.1	26.8
60°-70°	4710.7	31.1
70°-80°	1715.4	11.3
80°-90°	120.9	0.8
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°	15154.0	100.0
0°-180°	15154.0	100.0

**Coefficient of Utilization**



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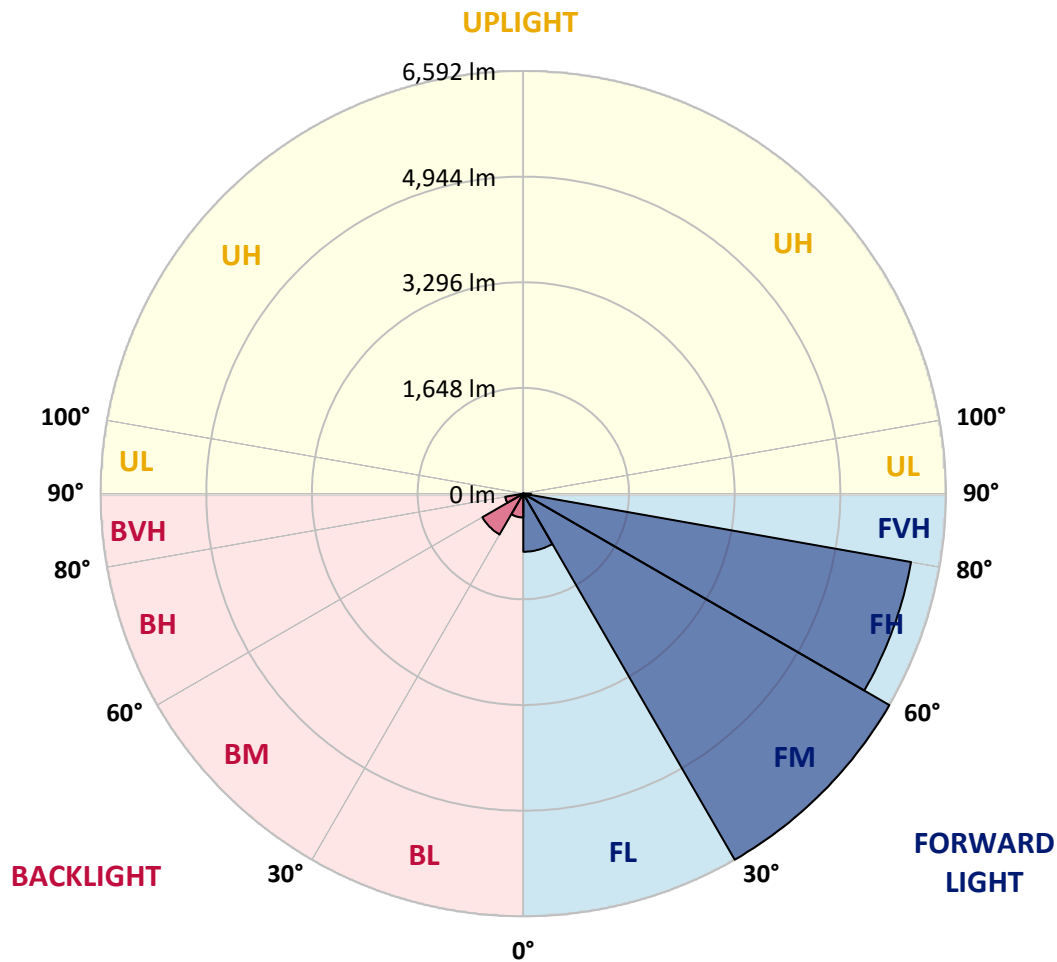
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	906.3	6.0			
FM (30°-60°)	6592.0	43.5			
FH (60°-80°)	6140.2	40.5			G3/7500
FVH (80°-90°)	119.2	0.8			G2/225
BL (0°-30°)	372.0	2.5	B1/500		
BM (30°-60°)	736.6	4.9	B1/1000		
BH (60°-80°)	285.9	1.9	B1/500		G1/500
BVH (80°-90°)	1.6	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-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4
2.5°	1587.6	1580.6	1577.1	1558.6	1544.7	1527.3	1527.3	1505.3	1479.9	1452.1	1426.6
5°	1764.7	1753.1	1738.1	1721.9	1689.5	1643.1	1643.1	1596.8	1543.5	1496.1	1444.0
7.5°	1934.9	1924.5	1899.0	1867.8	1814.5	1765.9	1762.4	1695.2	1631.6	1559.8	1485.7
10°	2084.3	2076.2	2054.2	1994.0	1938.4	1874.7	1873.6	1798.3	1724.2	1636.2	1544.7
12.5°	2188.5	2189.7	2160.7	2102.8	2031.0	1970.8	1966.2	1892.1	1814.5	1719.6	1607.2
15°	2262.6	2262.6	2232.5	2167.7	2102.8	2049.6	2044.9	1980.1	1900.2	1797.1	1675.6
17.5°	2283.5	2290.4	2258.0	2200.1	2148.0	2101.7	2100.5	2046.1	1982.4	1882.8	1745.0
20°	2275.4	2282.3	2256.8	2211.7	2175.8	2149.2	2145.7	2123.7	2064.6	1970.8	1819.1
22.5°	2258.0	2265.0	2246.4	2219.8	2202.4	2210.5	2204.7	2223.3	2192.0	2078.5	1907.1
25°	2261.5	2268.4	2254.5	2239.5	2254.5	2304.3	2319.4	2399.3	2371.5	2215.2	2002.1
27.5°	2370.3	2384.2	2364.5	2371.5	2424.8	2540.5	2569.5	2707.3	2584.5	2388.9	2150.3
30°	2612.3	2603.1	2566.0	2599.6	2784.9	3030.4	3022.3	3000.3	2808.0	2589.2	2326.3
32.5°	2832.4	2824.2	2821.9	2966.7	3302.5	3421.7	3416.0	3202.9	3008.4	2818.5	2500.0
35°	2921.5	2890.2	2883.3	3234.2	3795.8	3638.3	3602.4	3286.3	3251.5	3068.6	2677.2
37.5°	3190.2	3168.2	3060.5	3278.2	3598.9	3546.8	3519.0	3429.9	3510.9	3289.7	2877.5
40°	3743.7	3682.3	3585.0	3372.0	3319.8	3341.8	3369.6	3614.0	3817.8	3592.0	3145.0
42.5°	4431.5	4417.6	4236.9	3839.8	3449.5	3479.6	3515.5	3998.4	4258.9	4047.0	3581.5
45°	5257.1	5276.8	5016.2	4547.3	4035.5	4060.9	4113.0	4565.8	4856.5	4754.6	4268.2
47.5°	6007.5	5992.4	5904.4	5416.9	4944.5	4887.7	4972.2	5294.2	5683.2	5699.4	5120.5
50°	6762.4	6842.3	6711.5	6520.4	6169.6	6050.3	6019.0	6176.5	6769.4	6691.8	6144.1
52.5°	7847.4	7889.1	7643.6	7595.0	7674.9	7288.1	7256.9	7295.1	7825.4	7559.1	6910.7
55°	8529.5	8505.2	8413.7	8793.5	9109.6	8626.7	8587.4	8433.4	8702.0	8171.7	7648.3
57.5°	8744.9	8779.6	8992.7	9679.3	10427.4	10017.4	9945.6	9507.9	9334.3	8742.5	8326.8
60°	8648.7	8712.4	9172.1	10193.5	11231.0	11169.6	11108.2	10372.9	9788.2	9219.6	8802.8
62.5°	7964.4	8053.6	8788.9	10102.0	11503.1	11886.4	11810.0	10912.5	10090.4	9451.2	8886.1
65°	6674.4	6740.4	7796.5	9271.7	11116.3	12131.9	12104.1	11081.6	10137.9	9239.3	8315.3
67.5°	4758.0	4982.7	5961.1	7813.9	9972.3	11712.7	11760.2	10879.0	9692.1	8323.4	6886.3
70°	2991.0	3143.8	3845.6	5594.1	7994.5	10275.7	10432.0	9951.4	8411.4	6488.0	4609.8
72.5°	1426.6	1540.1	2040.3	3541.0	5642.7	8084.8	8208.7	8169.4	6504.2	4087.6	2378.4
75°	635.7	678.6	973.8	1807.6	3642.9	5434.3	5755.0	5808.3	4064.4	1999.8	925.2
77.5°	324.2	325.4	456.2	875.4	1819.1	3242.3	3306.0	3492.4	2203.6	881.2	321.9
80°	172.5	184.1	242.0	413.4	943.7	1596.8	1588.7	1746.2	977.3	431.9	107.7
82.5°	77.6	85.7	136.6	216.5	460.9	605.6	653.1	714.5	419.2	275.6	47.5
85°	23.2	27.8	67.2	108.8	166.7	174.9	195.7	252.4	237.4	195.7	24.3
87.5°	3.5	3.5	27.8	30.1	24.3	31.3	32.4	35.9	76.4	71.8	12.7
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°	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4	1410.4
2.5°	1412.7	1404.6	1375.6	1351.3	1330.5	1317.7	1302.7	1293.4	1288.8	1285.3	1286.5
5°	1418.5	1398.8	1349.0	1309.6	1279.5	1247.1	1225.1	1212.4	1206.6	1197.3	1197.3
7.5°	1450.9	1419.6	1350.2	1290.0	1237.9	1193.8	1152.2	1137.1	1126.7	1124.4	1122.1
10°	1497.2	1457.9	1362.9	1279.5	1205.4	1145.2	1086.2	1034.1	993.5	969.2	965.7
12.5°	1555.1	1498.4	1382.6	1272.6	1177.6	1071.1	914.8	809.4	738.8	716.8	720.2
15°	1608.4	1547.0	1402.3	1266.8	1126.7	888.1	711.0	590.6	554.7	551.2	552.3
17.5°	1672.1	1599.1	1425.4	1258.7	986.6	678.6	528.0	495.6	502.6	514.1	513.0
20°	1738.1	1654.7	1453.2	1210.1	787.4	510.7	466.7	470.1	480.6	491.0	493.3
22.5°	1808.7	1718.4	1485.7	1093.1	601.0	444.7	442.3	447.0	457.4	469.0	471.3
25°	1906.0	1798.3	1510.0	940.3	455.1	411.1	415.7	423.8	433.1	445.8	448.1
27.5°	2031.0	1906.0	1522.7	741.1	393.7	381.0	382.1	393.7	405.3	416.9	416.9
30°	2193.2	2034.5	1497.2	560.4	363.6	352.0	347.4	354.3	369.4	381.0	382.1
32.5°	2337.9	2156.1	1430.1	428.4	341.6	325.4	313.8	315.0	320.8	327.7	328.9
35°	2482.6	2274.2	1315.4	360.1	318.4	299.9	282.5	273.3	268.6	265.2	268.6
37.5°	2667.9	2421.3	1162.6	327.7	298.8	275.6	251.3	231.6	215.4	205.0	207.3
40°	2906.5	2625.1	981.9	306.9	280.2	252.4	220.0	194.5	166.7	157.5	152.8
42.5°	3300.2	2934.3	792.0	289.5	261.7	228.1	187.6	152.8	127.4	118.1	120.4
45°	3922.0	3324.5	610.2	271.0	243.2	201.5	157.5	120.4	99.6	95.0	97.3
47.5°	4746.4	3829.3	470.1	250.1	220.0	172.5	123.9	95.0	82.2	81.1	79.9
50°	5522.3	4299.5	392.5	227.0	192.2	143.6	101.9	79.9	71.8	70.6	70.6
52.5°	6224.0	4636.4	319.6	200.3	162.1	118.1	85.7	70.6	63.7	60.2	60.2
55°	6848.1	4856.5	259.4	167.9	127.4	93.8	74.1	63.7	55.6	50.9	49.8
57.5°	7319.4	4883.1	194.5	134.3	95.0	73.0	63.7	55.6	46.3	40.5	38.2
60°	7520.9	4652.7	143.6	101.9	70.6	57.9	50.9	45.2	34.7	28.9	27.8
62.5°	7318.3	4204.5	106.5	77.6	54.4	42.8	35.9	33.6	24.3	17.4	16.2
65°	6592.2	3557.2	84.5	59.1	40.5	31.3	23.2	22.0	15.1	8.1	6.9
67.5°	5281.4	2786.0	67.2	44.0	28.9	20.8	15.1	13.9	8.1	2.3	2.3
70°	3434.5	1780.9	54.4	32.4	18.5	13.9	9.3	6.9	4.6	1.2	0.0
72.5°	1698.7	832.6	44.0	25.5	12.7	6.9	3.5	2.3	3.5	0.0	0.0
75°	658.9	296.4	32.4	17.4	6.9	3.5	2.3	0.0	1.2	0.0	0.0
77.5°	218.9	98.4	19.7	9.3	4.6	2.3	0.0	0.0	0.0	0.0	0.0
80°	81.1	38.2	10.4	5.8	2.3	1.2	0.0	0.0	0.0	0.0	0.0
82.5°	32.4	15.1	6.9	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.2	9.3	4.6	3.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	6.9	4.6	3.5	2.3	1.2	0.0	0.0	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)