

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: P454067

Luminaire Tested: **GALN-SA5A-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17158 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

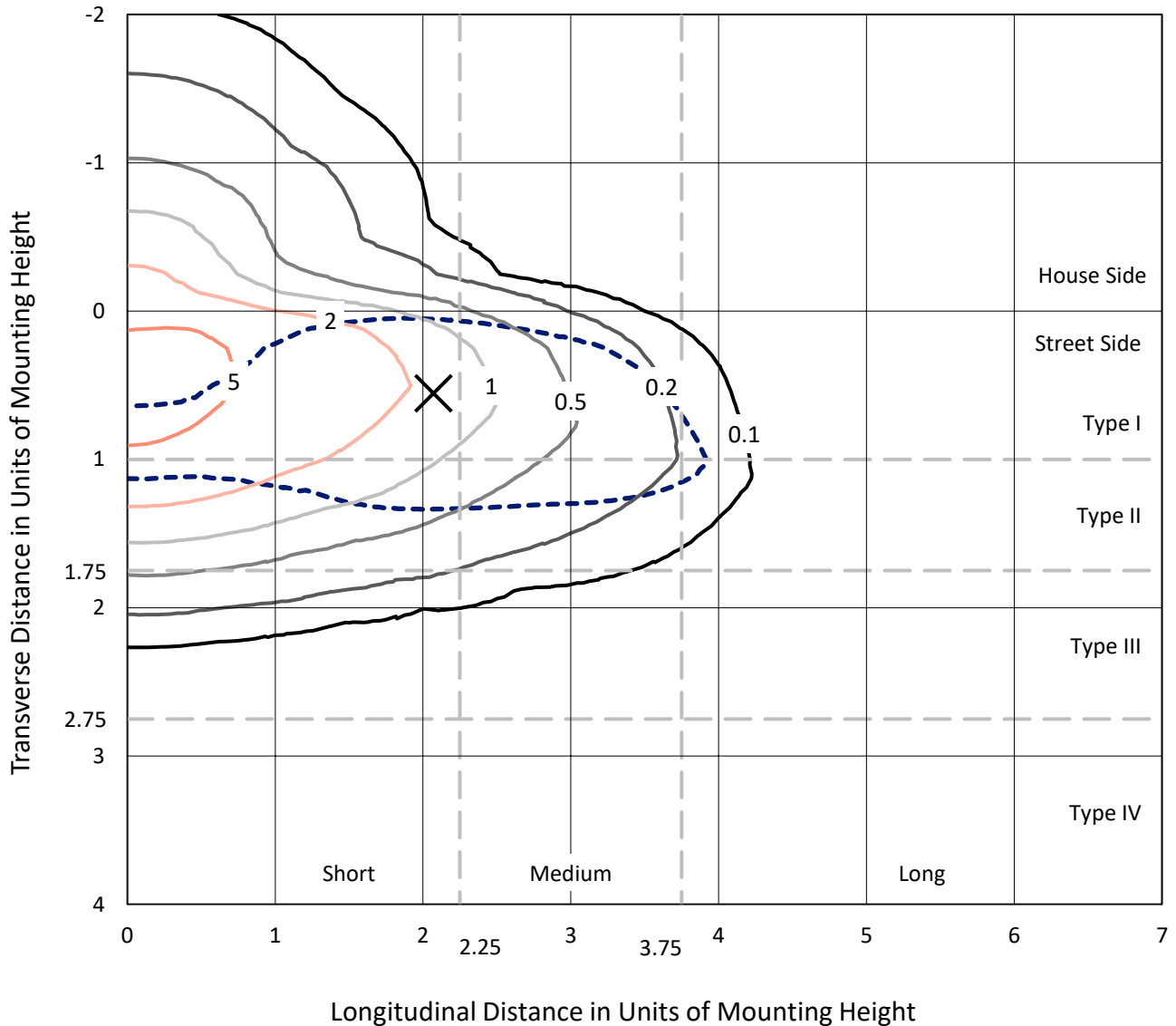
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P454067
 CATALOG NUMBER: GALN-SA5A-827-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

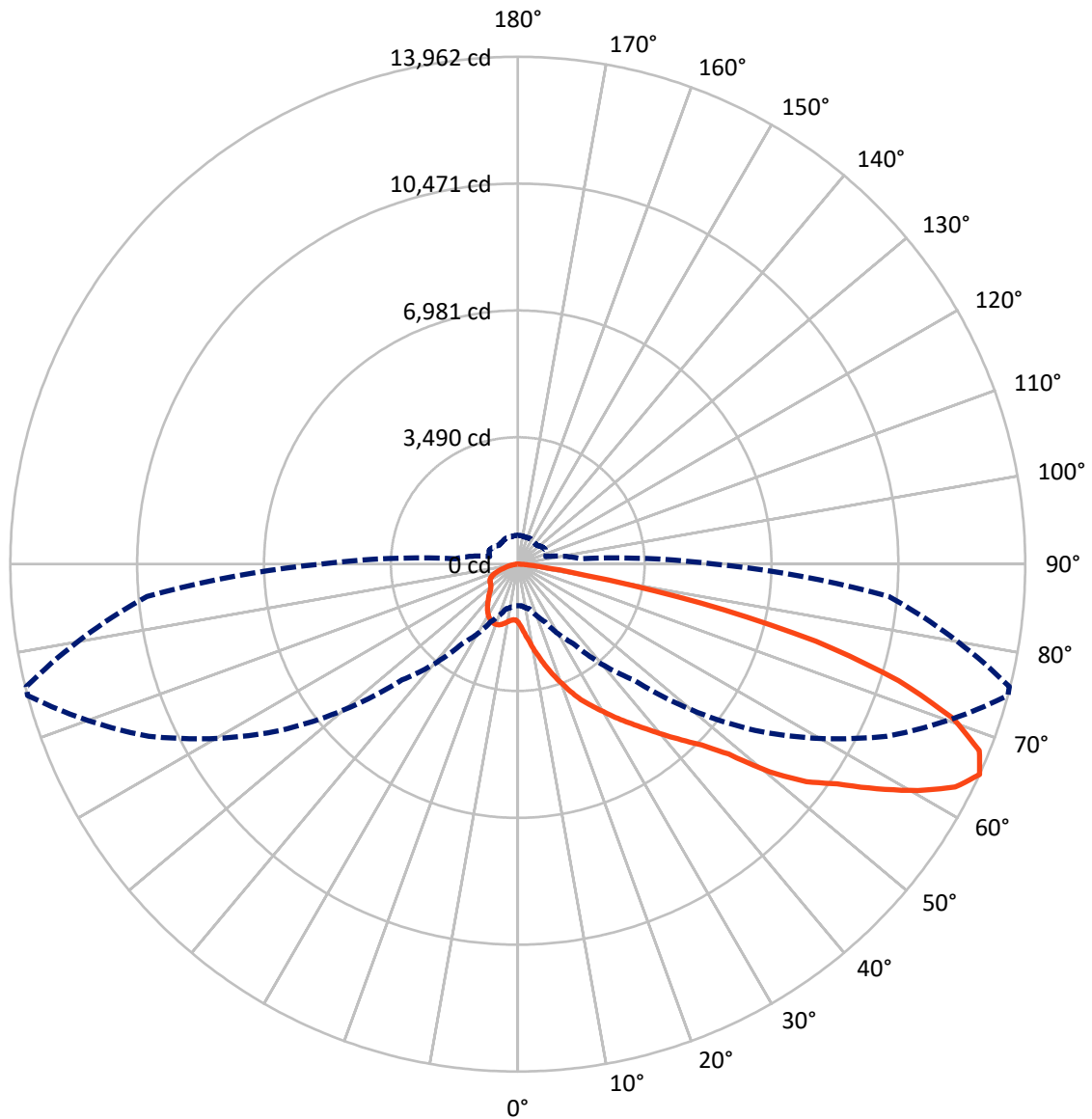
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - N/A

REPORT NUMBER: P454067
CATALOG NUMBER: GALN-SA5A-827-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P454067

CATALOG NUMBER: GALN-SA5A-827-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2884.5	0.0	2884.5
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	14273.5	0.0	14273.5
	% Fixture	83.2	0.0	83.2
Total	Lumens	17158.0	0.0	17158.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.7	1.1
10°-20°	758.7	4.4
20°-30°	1465.5	8.5
30°-40°	2380.4	13.9
40°-50°	3274.4	19.1
50°-60°	3866.0	22.5
60°-70°	3387.2	19.7
70°-80°	1617.1	9.4
80°-90°	215.2	1.3
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°	17158.0	100.0
0°-180°	17158.0	100.0

Coefficient of Utilization



REPORT NUMBER: P454067

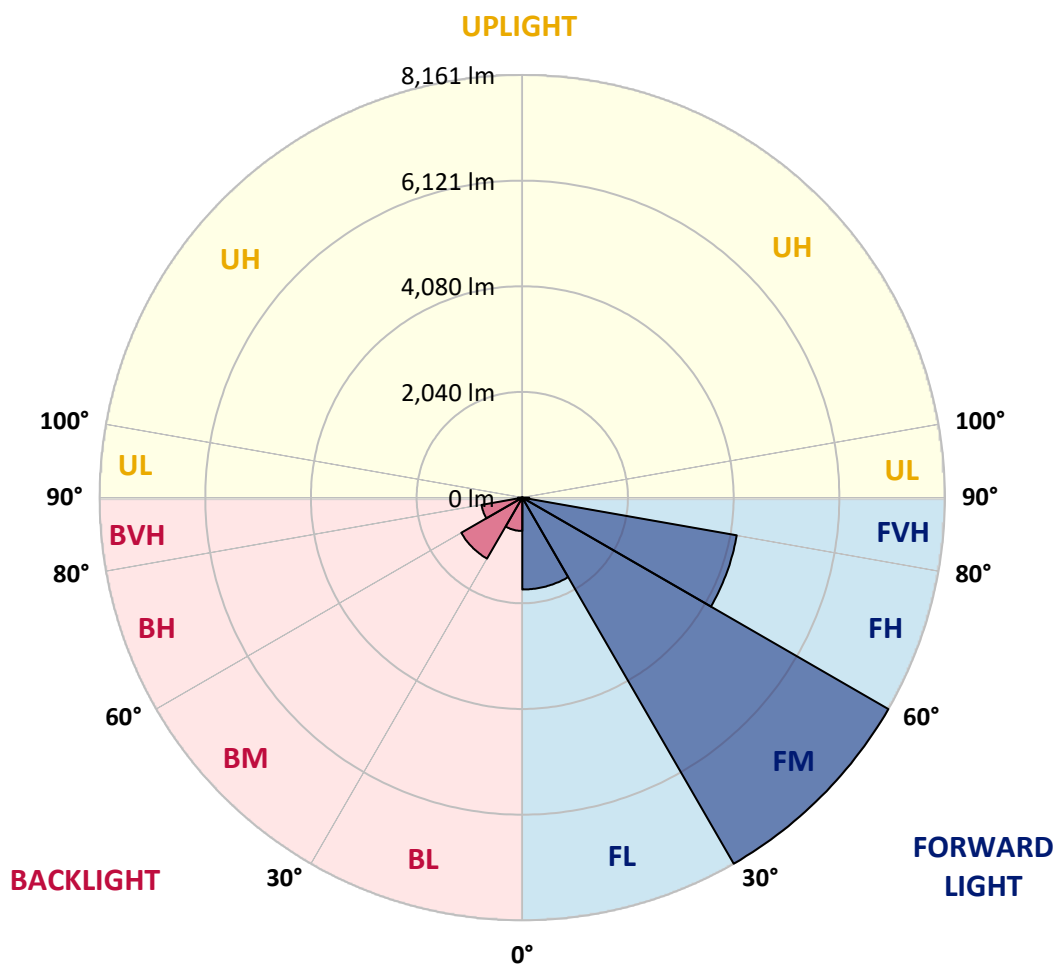
CATALOG NUMBER: GALN-SA5A-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1773.9	10.3			
FM (30°-60°)	8160.7	47.6			
FH (60°-80°)	4204.5	24.5			G2/5000
FVH (80°-90°)	134.5	0.8			G2/225
BL (0°-30°)	644.0	3.8	B2/1000		
BM (30°-60°)	1360.0	7.9	B2/2500		
BH (60°-80°)	799.8	4.7	B2/1000		G2/1000
BVH (80°-90°)	80.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P454067

CATALOG NUMBER: GALN-SA5A-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2
2.5°	2118.1	2104.2	2089.3	2048.3	2004.6	1955.3	1884.6	1816.6	1726.3	1723.6	1656.5
5°	2705.4	2696.1	2630.0	2591.8	2490.4	2355.5	2241.0	2063.2	1898.5	1879.0	1748.7
7.5°	3245.2	3208.9	3183.7	3114.9	3014.4	2841.3	2619.8	2379.7	2104.2	2078.1	1862.2
10°	3651.9	3648.1	3635.1	3575.5	3500.2	3328.0	3082.3	2738.0	2364.8	2313.6	2000.0
12.5°	3956.2	3959.0	3957.1	3956.2	3902.2	3756.1	3489.9	3127.0	2628.1	2591.8	2159.1
15°	4156.3	4184.2	4195.3	4241.9	4246.5	4148.8	3919.9	3502.9	2925.0	2871.0	2330.3
17.5°	4288.4	4302.4	4354.5	4433.6	4497.8	4480.1	4276.3	3851.0	3228.4	3138.1	2508.1
20°	4415.0	4439.2	4479.2	4587.1	4700.7	4752.8	4609.5	4207.4	3529.0	3471.3	2704.5
22.5°	4678.4	4712.8	4726.7	4781.7	4878.4	4970.6	4905.4	4549.0	3858.5	3780.3	2912.9
25°	5124.1	5160.4	5121.3	5108.3	5140.0	5185.6	5171.6	4871.0	4169.3	4057.6	3110.2
27.5°	5704.9	5709.5	5633.2	5560.6	5482.4	5459.2	5416.4	5156.7	4439.2	4346.1	3308.4
30°	6328.4	6306.1	6179.5	6048.3	5916.1	5785.8	5663.0	5432.2	4739.8	4632.8	3502.9
32.5°	6907.2	6895.1	6754.6	6550.8	6327.5	6204.6	5956.1	5710.4	5061.8	4958.5	3703.0
35°	7340.9	7358.6	7204.1	6981.7	6737.9	6629.0	6315.4	6002.7	5394.9	5282.3	3920.8
37.5°	7649.0	7639.7	7502.9	7310.2	7096.2	7001.2	6735.1	6321.9	5753.2	5645.3	4159.1
40°	7758.8	7753.2	7651.8	7511.2	7375.4	7341.9	7174.3	6666.2	6163.7	6037.1	4445.7
42.5°	7689.0	7701.1	7634.1	7595.9	7570.8	7595.0	7610.8	7117.6	6611.3	6495.0	4756.5
45°	7474.9	7468.4	7459.1	7521.5	7662.9	7822.1	8042.6	7543.8	7098.0	7005.0	5173.5
47.5°	7092.4	7139.0	7162.2	7334.4	7643.4	8020.3	8539.6	8115.2	7804.4	7723.4	5809.1
50°	6557.3	6594.6	6732.3	7038.5	7499.1	8094.8	9025.4	9049.6	8982.6	8830.9	6499.6
52.5°	5721.6	5779.3	6063.2	6624.3	7203.2	8064.0	9319.5	9850.9	9939.3	9825.8	7179.9
55°	4786.3	4867.3	5166.9	5903.1	6795.6	7896.5	9522.4	10315.3	10668.0	10562.8	7835.1
57.5°	3870.6	3956.2	4264.2	4977.1	6084.6	7526.1	9655.4	10832.7	11660.1	11523.2	8650.3
60°	2900.8	2990.2	3254.5	3988.7	5072.0	6802.1	9565.2	11281.3	12651.2	12592.6	9466.5
62.5°	1871.5	1970.2	2200.0	2807.8	3898.5	5812.8	9082.2	11528.8	13509.2	13438.5	10062.1
65°	1140.0	1151.2	1277.8	1743.1	2668.2	4500.6	7977.5	11200.3	13961.5	13940.1	10243.6
67.5°	737.1	754.8	812.5	1044.2	1599.8	3126.0	6378.6	10116.1	13697.2	13689.8	9868.6
70°	622.6	628.2	654.2	704.5	929.7	1895.7	4479.2	8387.9	12693.1	12693.1	8966.8
72.5°	556.5	564.0	573.3	589.1	663.5	1074.0	2672.8	6529.4	10959.3	11031.9	7632.2
75°	505.3	503.5	509.1	511.9	565.8	701.7	1382.0	4829.1	8478.2	8333.0	5527.1
77.5°	432.7	435.5	432.7	444.8	499.8	534.2	701.7	3240.5	5138.1	4950.1	2774.3
80°	355.5	360.2	364.8	372.3	427.2	405.8	421.6	1476.9	1900.4	1860.4	857.1
82.5°	267.1	273.6	281.1	298.7	336.0	268.0	266.2	631.0	685.9	628.2	315.5
85°	108.0	127.5	192.6	210.3	211.3	147.0	163.8	263.4	280.1	273.6	123.8
87.5°	25.1	29.8	62.4	94.0	86.5	54.9	60.5	85.6	97.7	90.3	41.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P454067
 CATALOG NUMBER: GALN-SA5A-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2	1594.2
2.5°	1625.8	1593.3	1537.4	1494.6	1463.9	1436.9	1420.2	1409.9	1406.2	1405.3	1406.2
5°	1680.7	1623.0	1534.6	1478.8	1448.1	1430.4	1420.2	1419.2	1420.2	1421.1	1418.3
7.5°	1756.1	1673.3	1557.9	1505.8	1482.5	1469.5	1464.8	1463.0	1463.9	1463.0	1463.0
10°	1856.6	1743.1	1603.5	1549.5	1530.0	1515.1	1507.6	1503.0	1499.3	1495.5	1493.7
12.5°	1967.4	1820.3	1652.8	1600.7	1572.8	1549.5	1532.8	1520.7	1512.3	1503.9	1502.1
15°	2091.2	1902.2	1707.7	1635.1	1595.1	1560.7	1531.8	1512.3	1497.4	1485.3	1484.4
17.5°	2209.4	1979.5	1745.0	1651.0	1592.3	1543.9	1505.8	1478.8	1460.2	1444.4	1442.5
20°	2335.9	2053.0	1761.7	1640.7	1564.4	1505.8	1455.5	1423.0	1401.6	1383.9	1381.1
22.5°	2463.4	2115.4	1759.8	1608.2	1516.0	1447.2	1394.1	1359.7	1334.5	1316.9	1310.3
25°	2585.3	2165.6	1736.6	1556.0	1449.0	1377.4	1323.4	1291.7	1269.4	1248.0	1248.0
27.5°	2695.1	2195.4	1692.8	1492.8	1380.1	1304.8	1262.0	1233.1	1212.6	1198.7	1190.3
30°	2803.1	2209.4	1633.3	1412.7	1307.6	1243.3	1208.9	1192.2	1173.5	1157.7	1155.9
32.5°	2899.9	2206.6	1558.8	1334.5	1238.7	1193.1	1179.1	1166.1	1146.6	1124.2	1118.6
35°	2993.9	2187.9	1470.4	1248.9	1181.0	1163.3	1167.0	1148.4	1113.1	1085.1	1080.5
37.5°	3096.3	2154.4	1373.6	1179.1	1132.6	1149.3	1158.7	1117.7	1060.0	1016.3	1006.0
40°	3214.4	2116.3	1273.1	1109.3	1094.4	1136.3	1136.3	1060.9	981.8	954.8	947.4
42.5°	3353.1	2084.6	1189.4	1050.7	1062.8	1104.7	1100.0	985.6	953.0	939.0	935.3
45°	3572.7	2073.5	1102.8	999.5	1036.7	1067.4	1029.3	959.5	940.9	929.7	926.0
47.5°	3919.9	2086.5	1026.5	961.4	1007.0	1030.2	950.2	941.8	928.8	913.0	911.1
50°	4241.9	2074.4	972.5	940.0	980.9	985.6	917.6	920.4	913.0	895.3	891.6
52.5°	4505.3	2036.3	938.1	928.8	958.6	907.4	886.9	897.1	894.3	872.0	868.3
55°	4794.7	2013.0	921.3	928.8	943.7	839.4	858.1	872.9	869.2	853.4	852.5
57.5°	5145.5	2017.6	909.2	931.6	928.8	805.0	829.2	846.9	846.0	841.3	841.3
60°	5504.8	2019.5	890.6	930.6	911.1	778.0	799.4	824.6	826.4	829.2	829.2
62.5°	5623.9	1938.5	854.3	913.9	872.0	752.0	771.5	805.9	804.1	811.5	812.5
65°	5401.5	1714.2	800.4	875.7	821.8	733.3	750.1	781.7	771.5	791.0	794.8
67.5°	4916.6	1418.3	716.6	806.9	765.9	713.8	736.1	748.2	729.6	767.8	768.7
70°	4249.3	1107.5	610.5	709.2	702.6	693.3	725.0	706.4	680.3	726.8	717.5
72.5°	3553.2	846.0	487.7	579.8	617.9	662.6	705.4	652.4	616.1	630.0	613.3
75°	2669.1	625.4	391.8	454.2	514.6	618.9	687.7	587.2	531.4	518.4	514.6
77.5°	1360.6	408.6	293.2	339.7	386.2	559.3	663.5	510.9	440.2	419.7	410.4
80°	485.8	254.1	206.6	234.5	260.6	481.1	579.8	422.5	341.5	337.8	341.5
82.5°	225.2	163.8	138.7	153.6	154.5	321.1	442.1	315.5	259.6	394.6	333.2
85°	96.8	81.9	78.2	76.3	70.7	143.3	248.5	169.4	264.3	118.2	108.9
87.5°	28.8	32.6	28.8	21.4	15.8	15.8	25.1	9.3	6.5	4.7	4.7
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)