

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: P456155

Luminaire Tested: **GALN-SA7B-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456155
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-SA7B-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29692 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

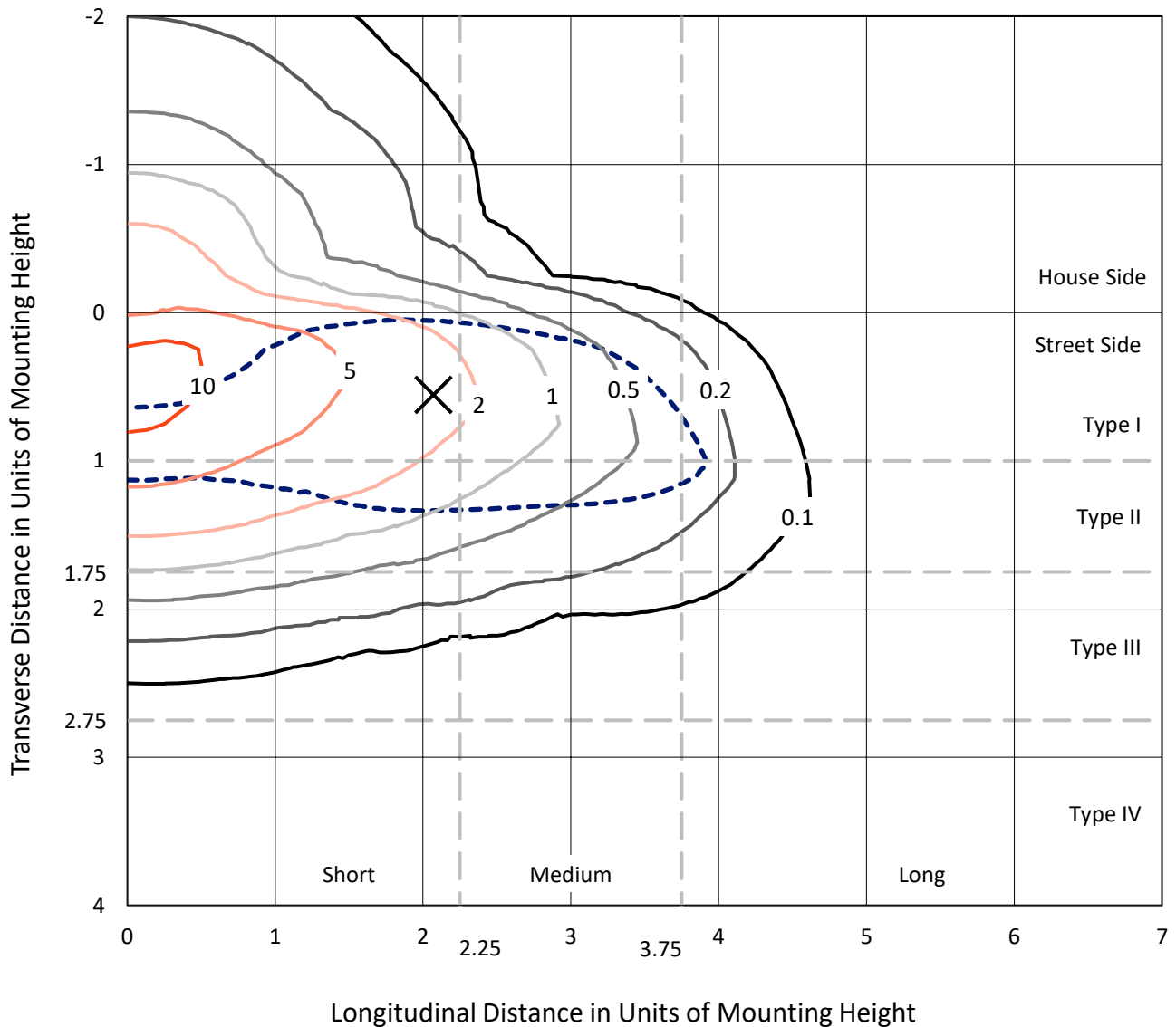
Input Watts (W): 286
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

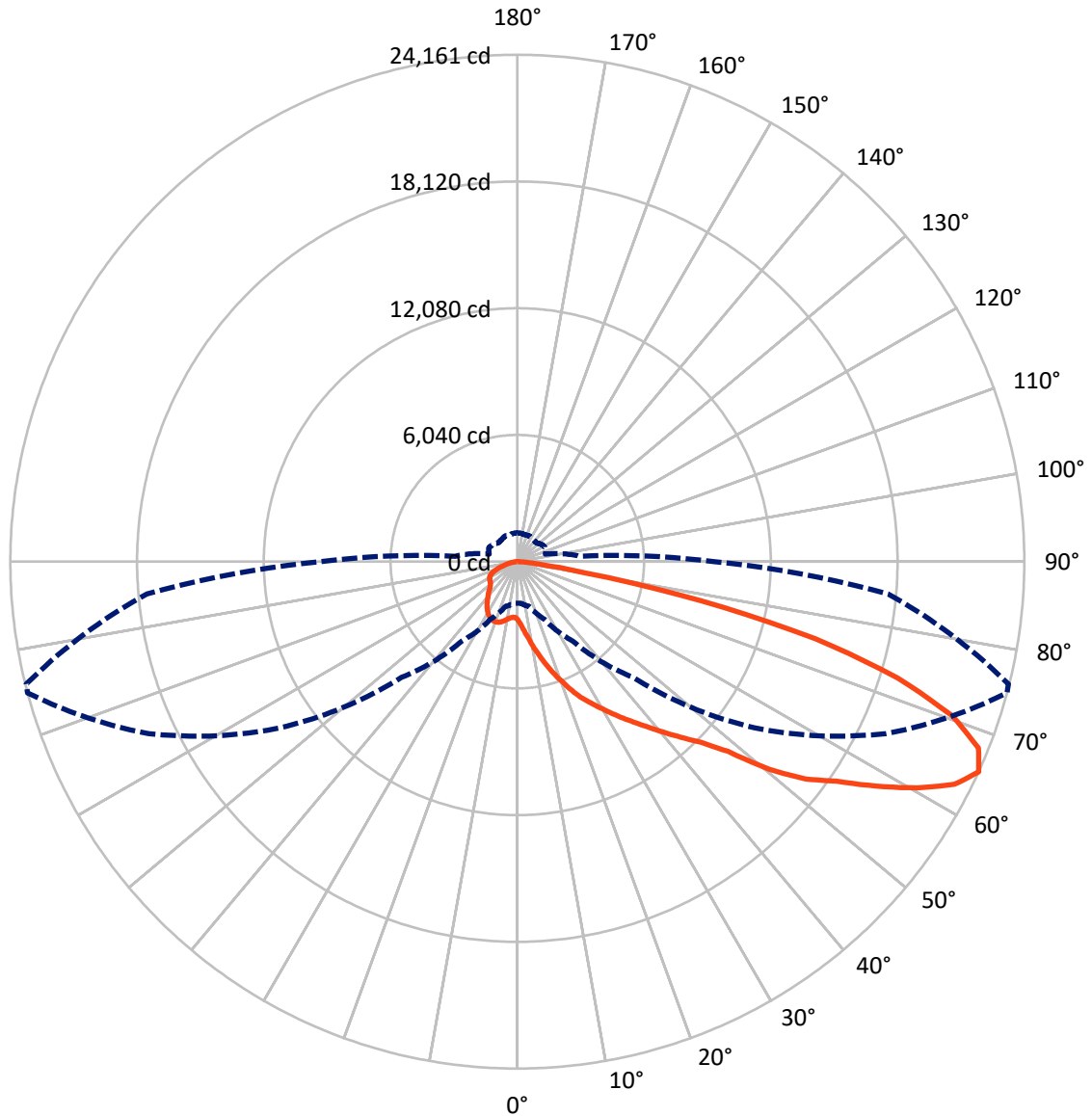
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4991.6	0.0	4991.6
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	24700.4	0.0	24700.4
	% Fixture	83.2	0.0	83.2
Total	Lumens	29692.0	0.0	29692.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.2	1.1
10°-20°	1312.9	4.4
20°-30°	2536.0	8.5
30°-40°	4119.2	13.9
40°-50°	5666.4	19.1
50°-60°	6690.1	22.5
60°-70°	5861.6	19.7
70°-80°	2798.4	9.4
80°-90°	372.4	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°	29692.0	100.0
0°-180°	29692.0	100.0

Coefficient of Utilization



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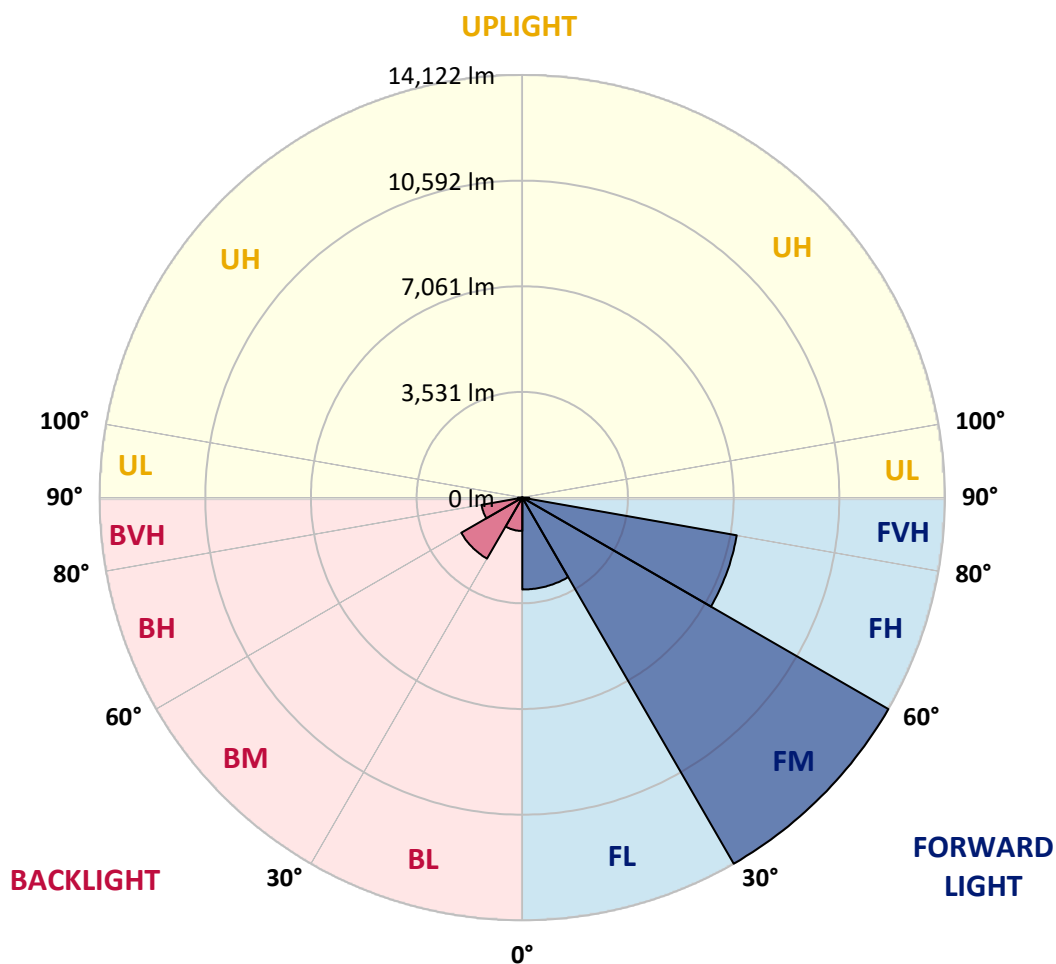
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3069.7	10.3			
FM	(30°-60°)	14122.1	47.6			
FH	(60°-80°)	7275.9	24.5			G3/7500
FVH	(80°-90°)	232.7	0.8			G3/500
BL	(0°-30°)	1114.4	3.8	B3/2500		
BM	(30°-60°)	2353.5	7.9	B2/2500		
BH	(60°-80°)	1384.1	4.7	B3/2500		G3/2500
BVH	(80°-90°)	139.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8
2.5°	3665.5	3641.3	3615.5	3544.7	3469.0	3383.6	3261.2	3143.7	2987.5	2982.6	2866.7
5°	4681.7	4665.6	4551.2	4485.2	4309.7	4076.1	3878.0	3570.4	3285.4	3251.6	3026.1
7.5°	5615.8	5553.0	5509.5	5390.3	5216.4	4916.8	4533.5	4118.0	3641.3	3596.2	3222.6
10°	6319.5	6313.1	6290.6	6187.5	6057.0	5759.1	5333.9	4738.0	4092.2	4003.7	3460.9
12.5°	6846.2	6851.0	6847.8	6846.2	6752.8	6499.9	6039.3	5411.2	4548.0	4485.2	3736.3
15°	7192.4	7240.7	7260.1	7340.6	7348.6	7179.5	6783.4	6061.9	5061.8	4968.3	4032.7
17.5°	7421.1	7445.3	7535.5	7672.4	7783.5	7752.9	7400.2	6664.2	5586.8	5430.6	4340.3
20°	7640.1	7682.0	7751.3	7938.1	8134.6	8224.7	7976.7	7281.0	6107.0	6007.1	4680.1
22.5°	8095.9	8155.5	8179.7	8274.7	8442.2	8601.6	8488.9	7872.1	6677.1	6541.8	5040.8
25°	8867.3	8930.1	8862.5	8840.0	8894.7	8973.6	8949.5	8429.3	7215.0	7021.7	5382.2
27.5°	9872.3	9880.3	9748.3	9622.7	9487.4	9447.1	9373.0	8923.7	7682.0	7521.0	5725.3
30°	10951.3	10912.7	10693.6	10466.5	10237.9	10012.4	9799.8	9400.4	8202.2	8017.0	6061.9
32.5°	11953.0	11932.1	11688.9	11336.2	10949.7	10737.1	10307.1	9881.9	8759.4	8580.7	6408.1
35°	12703.5	12734.1	12466.8	12081.9	11659.9	11471.5	10928.8	10387.6	9336.0	9141.1	6785.0
37.5°	13236.6	13220.5	12983.7	12650.4	12280.0	12115.7	11655.1	10940.0	9956.0	9769.2	7197.3
40°	13426.6	13417.0	13241.4	12998.2	12763.1	12705.1	12415.2	11535.9	10666.2	10447.2	7693.3
42.5°	13305.8	13326.8	13210.8	13144.8	13101.3	13143.2	13170.6	12317.0	11440.9	11239.6	8231.2
45°	12935.4	12924.1	12908.0	13015.9	13260.7	13536.1	13917.8	13054.6	12283.2	12122.1	8952.7
47.5°	12273.5	12354.0	12394.3	12692.2	13226.9	13879.2	14777.8	14043.4	13505.5	13365.4	10052.7
50°	11347.5	11411.9	11650.3	12180.1	12977.3	14008.0	15618.5	15660.4	15544.4	15281.9	11247.6
52.5°	9901.3	10001.1	10492.3	11463.4	12465.2	13954.9	16127.4	17047.0	17200.0	17003.5	12424.9
55°	8282.7	8422.8	8941.4	10215.3	11759.8	13665.0	16478.5	17850.6	18461.0	18279.0	13558.7
57.5°	6698.0	6846.2	7379.2	8612.9	10529.4	13024.0	16708.8	18746.1	20177.8	19941.0	14969.5
60°	5019.9	5174.5	5631.9	6902.5	8777.1	11771.0	16552.6	19522.3	21892.9	21791.5	16381.9
62.5°	3238.7	3409.4	3807.2	4858.8	6746.3	10059.1	15716.7	19950.7	23377.8	23255.4	17412.6
65°	1972.8	1992.2	2211.2	3016.4	4617.3	7788.3	13805.1	19382.2	24160.5	24123.5	17726.6
67.5°	1275.5	1306.1	1406.0	1807.0	2768.4	5409.6	11038.3	17506.0	23703.1	23690.2	17077.6
70°	1077.4	1087.1	1132.2	1219.1	1608.9	3280.6	7751.3	14515.3	21965.4	21965.4	15517.0
72.5°	963.1	976.0	992.1	1019.4	1148.3	1858.5	4625.3	11299.2	18965.1	19090.7	13207.6
75°	874.5	871.3	880.9	885.8	979.2	1214.3	2391.6	8356.8	14671.5	14420.3	9564.7
77.5°	748.9	753.7	748.9	769.8	864.8	924.4	1214.3	5607.7	8891.5	8566.2	4800.9
80°	615.2	623.3	631.3	644.2	739.2	702.2	729.5	2555.8	3288.6	3219.4	1483.3
82.5°	462.2	473.5	486.4	517.0	581.4	463.8	460.6	1091.9	1186.9	1087.1	546.0
85°	186.8	220.6	333.4	364.0	365.6	254.5	283.4	455.8	484.8	473.5	214.2
87.5°	43.5	51.5	107.9	162.7	149.8	95.0	104.7	148.2	169.1	156.2	72.5
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°	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8	2758.8
2.5°	2813.5	2757.2	2660.5	2586.4	2533.3	2486.6	2457.6	2439.9	2433.4	2431.8	2433.4
5°	2908.5	2808.7	2655.7	2559.1	2505.9	2475.3	2457.6	2456.0	2457.6	2459.2	2454.4
7.5°	3039.0	2895.7	2696.0	2605.8	2565.5	2543.0	2534.9	2531.7	2533.3	2531.7	2531.7
10°	3212.9	3016.4	2774.9	2681.5	2647.6	2621.9	2609.0	2600.9	2594.5	2588.1	2584.8
12.5°	3404.6	3150.1	2860.2	2770.0	2721.7	2681.5	2652.5	2631.5	2617.0	2602.5	2599.3
15°	3618.8	3291.8	2955.2	2829.6	2760.4	2700.8	2650.9	2617.0	2591.3	2570.3	2568.7
17.5°	3823.3	3425.5	3019.7	2857.0	2755.5	2671.8	2605.8	2559.1	2526.9	2499.5	2496.3
20°	4042.3	3552.7	3048.6	2839.3	2707.2	2605.8	2518.8	2462.4	2425.4	2394.8	2390.0
22.5°	4263.0	3660.6	3045.4	2782.9	2623.5	2504.3	2412.5	2352.9	2309.4	2278.8	2267.6
25°	4473.9	3747.6	3005.2	2692.7	2507.5	2383.5	2290.1	2235.4	2196.7	2159.7	2159.7
27.5°	4664.0	3799.1	2929.5	2583.2	2388.4	2257.9	2183.8	2133.9	2098.5	2074.3	2059.8
30°	4850.8	3823.3	2826.4	2444.7	2262.7	2151.6	2092.0	2063.0	2030.8	2003.4	2000.2
32.5°	5018.3	3818.5	2697.6	2309.4	2143.6	2064.6	2040.5	2017.9	1984.1	1945.5	1935.8
35°	5180.9	3786.3	2544.6	2161.3	2043.7	2013.1	2019.5	1987.3	1926.1	1877.8	1869.8
37.5°	5358.1	3728.3	2377.1	2040.5	1960.0	1988.9	2005.1	1934.2	1834.3	1758.7	1740.9
40°	5562.6	3662.2	2203.1	1919.7	1893.9	1966.4	1966.4	1836.0	1699.1	1652.4	1639.5
42.5°	5802.6	3607.5	2058.2	1818.2	1839.2	1911.6	1903.6	1705.5	1649.1	1625.0	1618.5
45°	6182.7	3588.2	1908.4	1729.7	1794.1	1847.2	1781.2	1660.4	1628.2	1608.9	1602.4
47.5°	6783.4	3610.7	1776.4	1663.6	1742.5	1782.8	1644.3	1629.8	1607.3	1579.9	1576.7
50°	7340.6	3589.8	1683.0	1626.6	1697.5	1705.5	1587.9	1592.8	1579.9	1549.3	1542.8
52.5°	7796.4	3523.7	1623.4	1607.3	1658.8	1570.2	1534.8	1552.5	1547.7	1509.0	1502.6
55°	8297.2	3483.5	1594.4	1607.3	1633.0	1452.7	1484.9	1510.6	1504.2	1476.8	1475.2
57.5°	8904.4	3491.5	1573.4	1612.1	1607.3	1393.1	1434.9	1465.5	1463.9	1455.9	1455.9
60°	9526.0	3494.8	1541.2	1610.5	1576.7	1346.4	1383.4	1426.9	1430.1	1434.9	1434.9
62.5°	9732.2	3354.6	1478.4	1581.5	1509.0	1301.3	1335.1	1394.7	1391.5	1404.3	1406.0
65°	9347.3	2966.5	1385.0	1515.5	1422.1	1269.1	1298.1	1352.8	1335.1	1368.9	1375.4
67.5°	8508.2	2454.4	1240.1	1396.3	1325.4	1235.2	1273.9	1294.8	1262.6	1328.7	1330.3
70°	7353.5	1916.5	1056.5	1227.2	1215.9	1199.8	1254.6	1222.4	1177.3	1257.8	1241.7
72.5°	6148.8	1463.9	843.9	1003.3	1069.4	1146.7	1220.7	1129.0	1066.1	1090.3	1061.3
75°	4618.9	1082.2	678.0	785.9	890.6	1071.0	1190.1	1016.2	919.6	897.0	890.6
77.5°	2354.5	707.0	507.3	587.8	668.4	967.9	1148.3	884.2	761.8	726.3	710.2
80°	840.7	439.7	357.5	405.8	450.9	832.6	1003.3	731.2	591.0	584.6	591.0
82.5°	389.7	283.4	240.0	265.7	267.3	555.6	765.0	546.0	449.3	682.8	576.6
85°	167.5	141.7	135.3	132.1	122.4	248.0	430.0	293.1	457.4	204.5	188.4
87.5°	49.9	56.4	49.9	37.0	27.4	27.4	43.5	16.1	11.3	8.1	8.1
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)