

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: P456851

Luminaire Tested: **GALN-SA8A-827-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456851
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-SA8A-827-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 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: 27666 lumens
Efficiency: N/A
Efficacy: 113.4 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

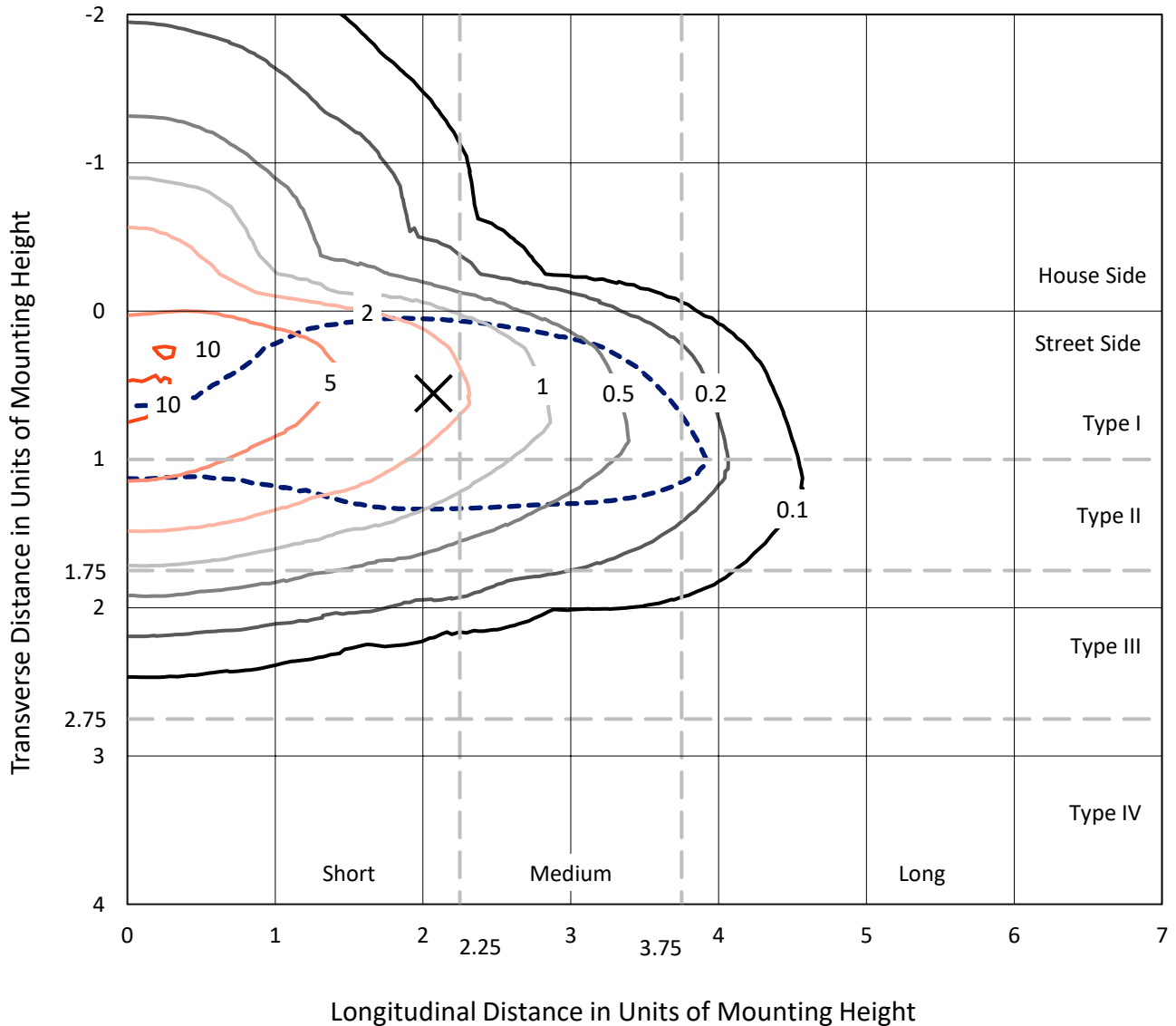
Input Watts (W): 244
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

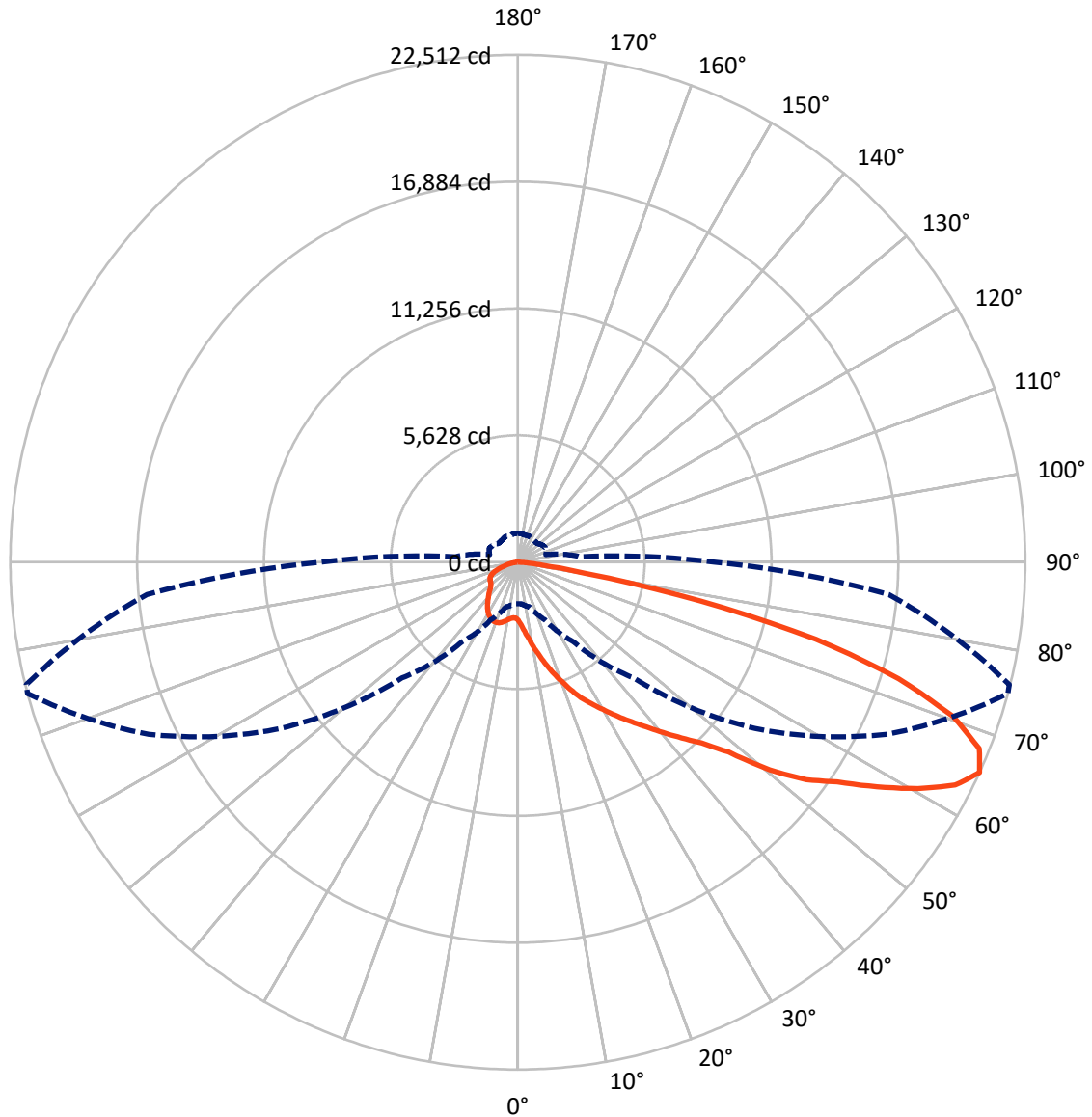
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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	4651.0	0.0	4651.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	23015.0	0.0	23015.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	27666.0	0.0	27666.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.3	1.1
10°-20°	1223.3	4.4
20°-30°	2363.0	8.5
30°-40°	3838.2	13.9
40°-50°	5279.7	19.1
50°-60°	6233.6	22.5
60°-70°	5461.6	19.7
70°-80°	2607.4	9.4
80°-90°	347.0	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°	27666.0	100.0
0°-180°	27666.0	100.0

Coefficient of Utilization



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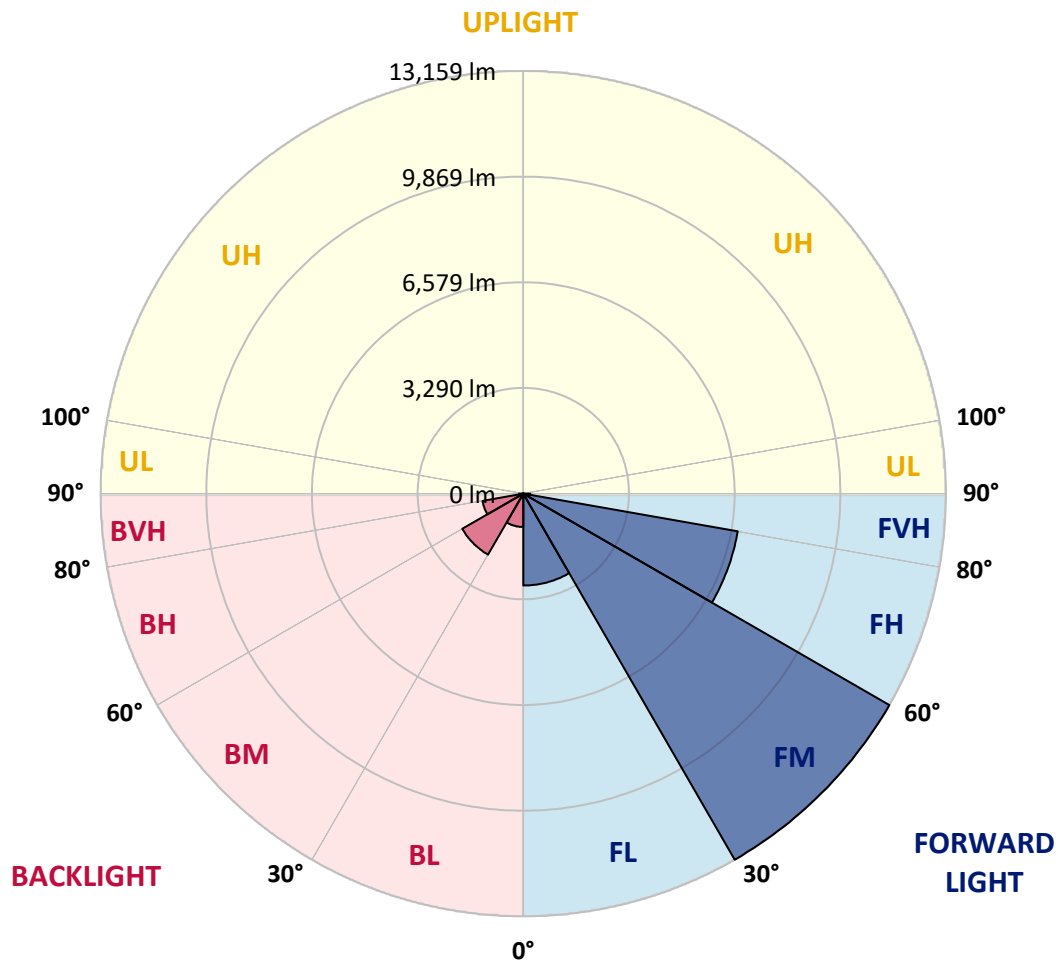
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2860.2	10.3			
FM	(30°-60°)	13158.5	47.6			
FH	(60°-80°)	6779.4	24.5			G3/7500
FVH	(80°-90°)	216.8	0.8			G2/225
BL	(0°-30°)	1038.3	3.8	B3/2500		
BM	(30°-60°)	2192.9	7.9	B2/2500		
BH	(60°-80°)	1289.6	4.7	B3/2500		G3/2500
BVH	(80°-90°)	130.1	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°	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5
2.5°	3415.4	3392.8	3368.8	3302.8	3232.3	3152.8	3038.7	2929.2	2783.6	2779.1	2671.1
5°	4362.2	4347.2	4240.7	4179.2	4015.6	3798.0	3613.4	3326.8	3061.2	3029.7	2819.6
7.5°	5232.6	5174.1	5133.5	5022.5	4860.4	4581.3	4224.2	3837.0	3392.8	3350.8	3002.7
10°	5888.3	5882.3	5861.3	5765.3	5643.7	5366.1	4970.0	4414.8	3813.0	3730.5	3224.8
12.5°	6379.0	6383.5	6380.5	6379.0	6292.0	6056.4	5627.2	5042.0	4237.7	4179.2	3481.4
15°	6701.7	6746.7	6764.7	6839.7	6847.2	6689.7	6320.5	5648.2	4716.4	4629.3	3757.5
17.5°	6914.7	6937.3	7021.3	7148.8	7252.4	7223.9	6895.2	6209.5	5205.6	5060.0	4044.1
20°	7118.8	7157.8	7222.4	7396.4	7579.5	7663.5	7432.5	6784.2	5690.3	5597.2	4360.7
22.5°	7543.5	7599.0	7621.5	7710.1	7866.1	8014.7	7909.6	7334.9	6221.5	6095.4	4696.9
25°	8262.3	8320.8	8257.8	8236.8	8287.8	8361.3	8338.8	7854.1	6722.7	6542.6	5015.0
27.5°	9198.7	9206.2	9083.1	8966.1	8840.0	8802.5	8733.5	8314.8	7157.8	7007.8	5334.6
30°	10204.1	10168.0	9964.0	9752.4	9539.3	9329.2	9131.1	8759.0	7642.5	7470.0	5648.2
32.5°	11137.4	11117.9	10891.3	10562.7	10202.6	10004.5	9603.8	9207.7	8161.7	7995.2	5970.9
35°	11836.7	11865.2	11616.1	11257.5	10864.3	10688.7	10183.0	9678.8	8699.0	8517.4	6322.0
37.5°	12333.4	12318.4	12097.8	11787.2	11442.0	11289.0	10859.8	10193.5	9276.7	9102.6	6706.2
40°	12510.5	12501.5	12337.9	12111.3	11892.2	11838.2	11568.1	10748.8	9938.4	9734.4	7168.3
42.5°	12397.9	12417.4	12309.4	12247.9	12207.3	12246.4	12271.9	11476.6	10660.2	10472.7	7669.5
45°	12052.8	12042.3	12027.3	12127.8	12355.9	12612.5	12968.2	12163.8	11445.0	11295.0	8341.8
47.5°	11436.0	11511.1	11548.6	11826.2	12324.4	12932.1	13769.5	13085.2	12584.0	12453.4	9366.7
50°	10573.2	10633.2	10855.3	11349.0	12091.8	13052.2	14552.8	14591.8	14483.8	14239.2	10480.2
52.5°	9225.7	9318.7	9776.4	10681.2	11614.6	13002.7	15027.0	15883.8	16026.4	15843.3	11577.1
55°	7717.6	7848.1	8331.3	9518.3	10957.4	12732.6	15354.1	16632.6	17201.3	17031.8	12633.5
57.5°	6241.0	6379.0	6875.7	8025.2	9810.9	12135.3	15568.7	17466.9	18801.0	18580.4	13948.0
60°	4677.4	4821.4	5247.6	6431.6	8178.2	10967.9	15423.1	18190.2	20399.1	20304.6	15264.1
62.5°	3017.7	3176.8	3547.4	4527.3	6286.0	9372.7	14644.3	18589.4	21782.7	21668.6	16224.4
65°	1838.2	1856.2	2060.3	2810.6	4302.2	7256.9	12863.1	18059.7	22511.9	22477.4	16517.1
67.5°	1188.5	1217.0	1310.0	1683.7	2579.5	5040.5	10285.1	16311.5	22085.8	22073.8	15912.3
70°	1003.9	1012.9	1054.9	1136.0	1499.1	3056.7	7222.4	13524.9	20466.6	20466.6	14458.2
72.5°	897.4	909.4	924.4	949.9	1069.9	1731.7	4309.7	10528.2	17671.0	17788.1	12306.4
75°	814.8	811.8	820.8	825.3	912.4	1131.4	2228.4	7786.6	13670.4	13436.3	8912.0
77.5°	697.8	702.3	697.8	717.3	805.8	861.3	1131.4	5225.1	8284.8	7981.7	4473.3
80°	573.2	580.7	588.2	600.2	688.8	654.3	679.8	2381.4	3064.2	2999.7	1382.0
82.5°	430.7	441.2	453.2	481.7	541.7	432.2	429.2	1017.4	1105.9	1012.9	508.7
85°	174.1	205.6	310.6	339.1	340.6	237.1	264.1	424.7	451.7	441.2	199.6
87.5°	40.5	48.0	100.5	151.6	139.6	88.5	97.5	138.1	157.6	145.6	67.5
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°	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5	2570.5
2.5°	2621.5	2569.0	2479.0	2410.0	2360.4	2316.9	2289.9	2273.4	2267.4	2265.9	2267.4
5°	2710.1	2617.0	2474.5	2384.4	2334.9	2306.4	2289.9	2288.4	2289.9	2291.4	2286.9
7.5°	2831.6	2698.1	2512.0	2428.0	2390.4	2369.4	2361.9	2358.9	2360.4	2358.9	2358.9
10°	2993.7	2810.6	2585.5	2498.5	2467.0	2443.0	2431.0	2423.5	2417.5	2411.5	2408.5
12.5°	3172.3	2935.2	2665.1	2581.0	2536.0	2498.5	2471.5	2452.0	2438.5	2425.0	2422.0
15°	3371.8	3067.2	2753.6	2636.5	2572.0	2516.5	2470.0	2438.5	2414.5	2395.0	2393.5
17.5°	3562.4	3191.8	2813.6	2662.1	2567.5	2489.5	2428.0	2384.4	2354.4	2328.9	2325.9
20°	3766.5	3310.3	2840.6	2645.6	2522.5	2428.0	2346.9	2294.4	2259.9	2231.4	2226.9
22.5°	3972.1	3410.9	2837.6	2593.0	2444.5	2333.4	2247.9	2192.4	2151.9	2123.3	2112.8
25°	4168.7	3491.9	2800.1	2509.0	2336.4	2220.9	2133.8	2082.8	2046.8	2012.3	2012.3
27.5°	4345.7	3539.9	2729.6	2407.0	2225.4	2103.8	2034.8	1988.3	1955.3	1932.8	1919.3
30°	4519.8	3562.4	2633.5	2277.9	2108.3	2004.8	1949.3	1922.3	1892.3	1866.7	1863.7
32.5°	4675.9	3557.9	2513.5	2151.9	1997.3	1923.8	1901.3	1880.2	1848.7	1812.7	1803.7
35°	4827.4	3527.9	2370.9	2013.8	1904.3	1875.7	1881.7	1851.7	1794.7	1749.7	1742.2
37.5°	4992.5	3473.9	2214.9	1901.3	1826.2	1853.2	1868.2	1802.2	1709.2	1638.7	1622.1
40°	5183.1	3412.4	2052.8	1788.7	1764.7	1832.2	1832.2	1710.7	1583.1	1539.6	1527.6
42.5°	5406.6	3361.3	1917.8	1694.2	1713.7	1781.2	1773.7	1589.1	1536.6	1514.1	1508.1
45°	5760.8	3343.3	1778.2	1611.6	1671.7	1721.2	1659.7	1547.1	1517.1	1499.1	1493.1
47.5°	6320.5	3364.3	1655.2	1550.1	1623.6	1661.2	1532.1	1518.6	1497.6	1472.1	1469.1
50°	6839.7	3344.8	1568.1	1515.6	1581.6	1589.1	1479.6	1484.1	1472.1	1443.6	1437.6
52.5°	7264.4	3283.3	1512.6	1497.6	1545.6	1463.1	1430.1	1446.6	1442.1	1406.1	1400.1
55°	7731.1	3245.8	1485.6	1497.6	1521.6	1353.5	1383.5	1407.6	1401.6	1376.0	1374.5
57.5°	8296.8	3253.3	1466.1	1502.1	1497.6	1298.0	1337.0	1365.5	1364.0	1356.5	1356.5
60°	8876.0	3256.3	1436.1	1500.6	1469.1	1254.5	1289.0	1329.5	1332.5	1337.0	1337.0
62.5°	9068.1	3125.7	1377.5	1473.6	1406.1	1212.5	1244.0	1299.5	1296.5	1308.5	1310.0
65°	8709.5	2764.1	1290.5	1412.1	1325.0	1182.5	1209.5	1260.5	1244.0	1275.5	1281.5
67.5°	7927.6	2286.9	1155.5	1301.0	1235.0	1151.0	1187.0	1206.5	1176.5	1238.0	1239.5
70°	6851.7	1785.7	984.4	1143.5	1132.9	1117.9	1169.0	1139.0	1096.9	1172.0	1157.0
72.5°	5729.3	1364.0	786.3	934.9	996.4	1068.4	1137.5	1051.9	993.4	1015.9	988.9
75°	4303.7	1008.4	631.8	732.3	829.8	997.9	1108.9	946.9	856.8	835.8	829.8
77.5°	2193.9	658.8	472.7	547.7	622.7	901.9	1069.9	823.8	709.8	676.8	661.8
80°	783.3	409.7	333.1	378.2	420.2	775.8	934.9	681.3	550.7	544.7	550.7
82.5°	363.1	264.1	223.6	247.6	249.1	517.7	712.8	508.7	418.7	636.3	537.2
85°	156.1	132.1	126.1	123.0	114.0	231.1	400.7	273.1	426.2	190.6	175.6
87.5°	46.5	52.5	46.5	34.5	25.5	25.5	40.5	15.0	10.5	7.5	7.5
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)