

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: P453373

Luminaire Tested: **GALN-SA4B-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16409 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

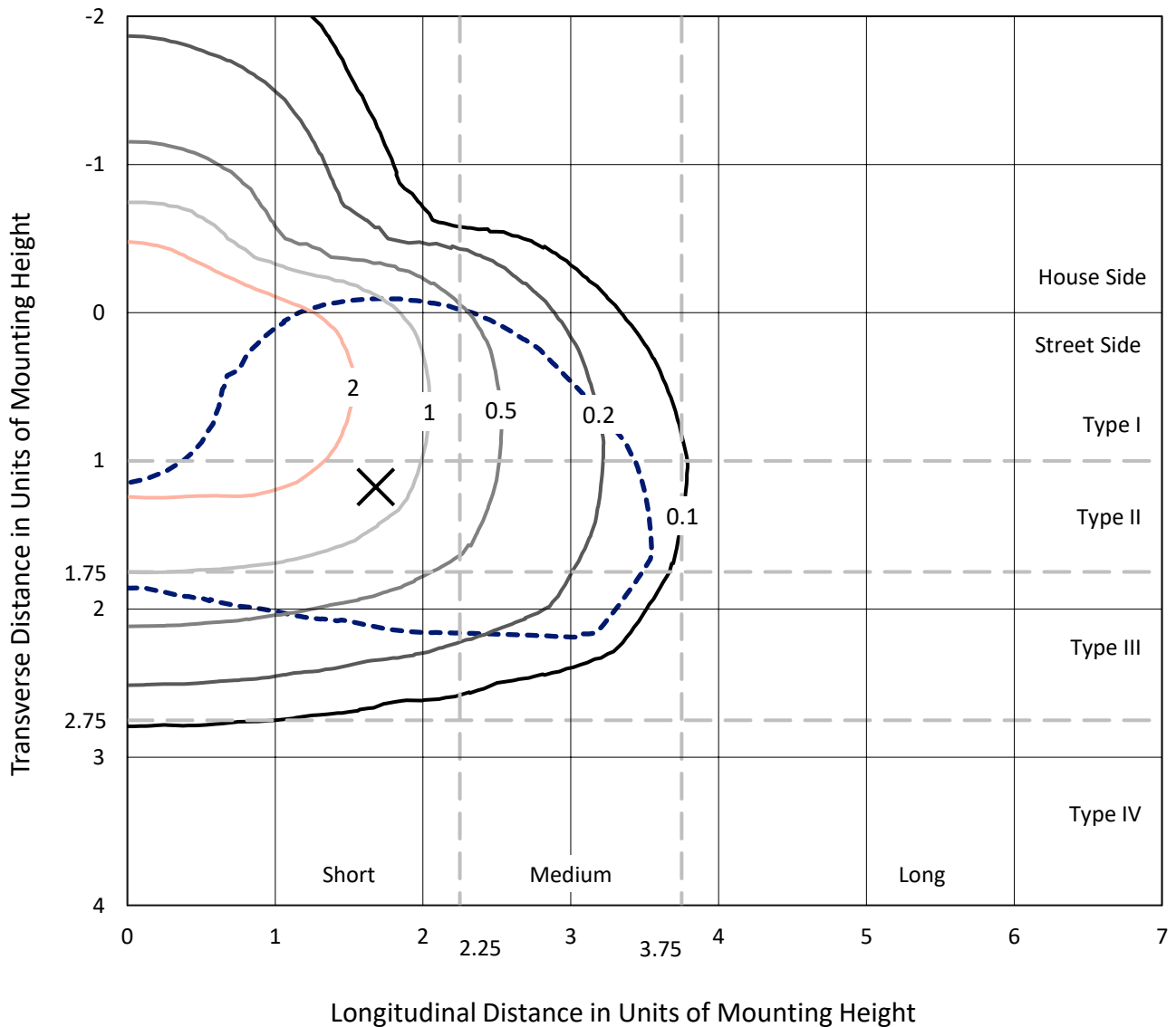
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453373
 CATALOG NUMBER: GALN-SA4B-827-U-T3

Iso-Footcandle Lines of Horizontal Illumination

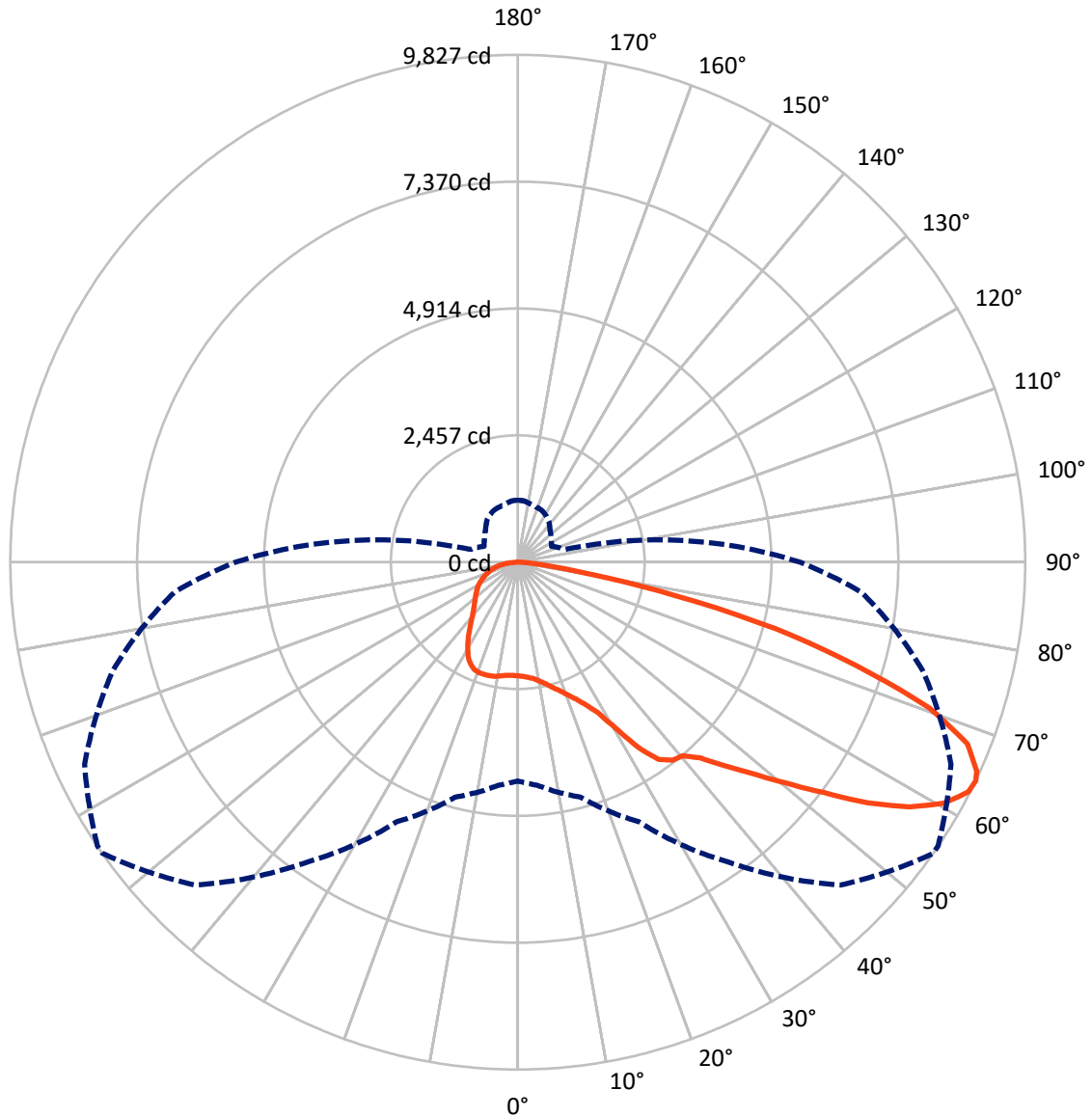
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - N/A

REPORT NUMBER: P453373
CATALOG NUMBER: GALN-SA4B-827-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P453373

CATALOG NUMBER: GALN-SA4B-827-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3986.1	0.0	3986.1
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	12422.9	0.0	12422.9
	% Fixture	75.7	0.0	75.7
Total	Lumens	16409.0	0.0	16409.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.2	1.3
10°-20°	675.7	4.1
20°-30°	1203.0	7.3
30°-40°	1850.9	11.3
40°-50°	2623.8	16.0
50°-60°	3797.9	23.1
60°-70°	3930.4	24.0
70°-80°	1840.6	11.2
80°-90°	272.5	1.7
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°	16409.0	100.0
0°-180°	16409.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453373

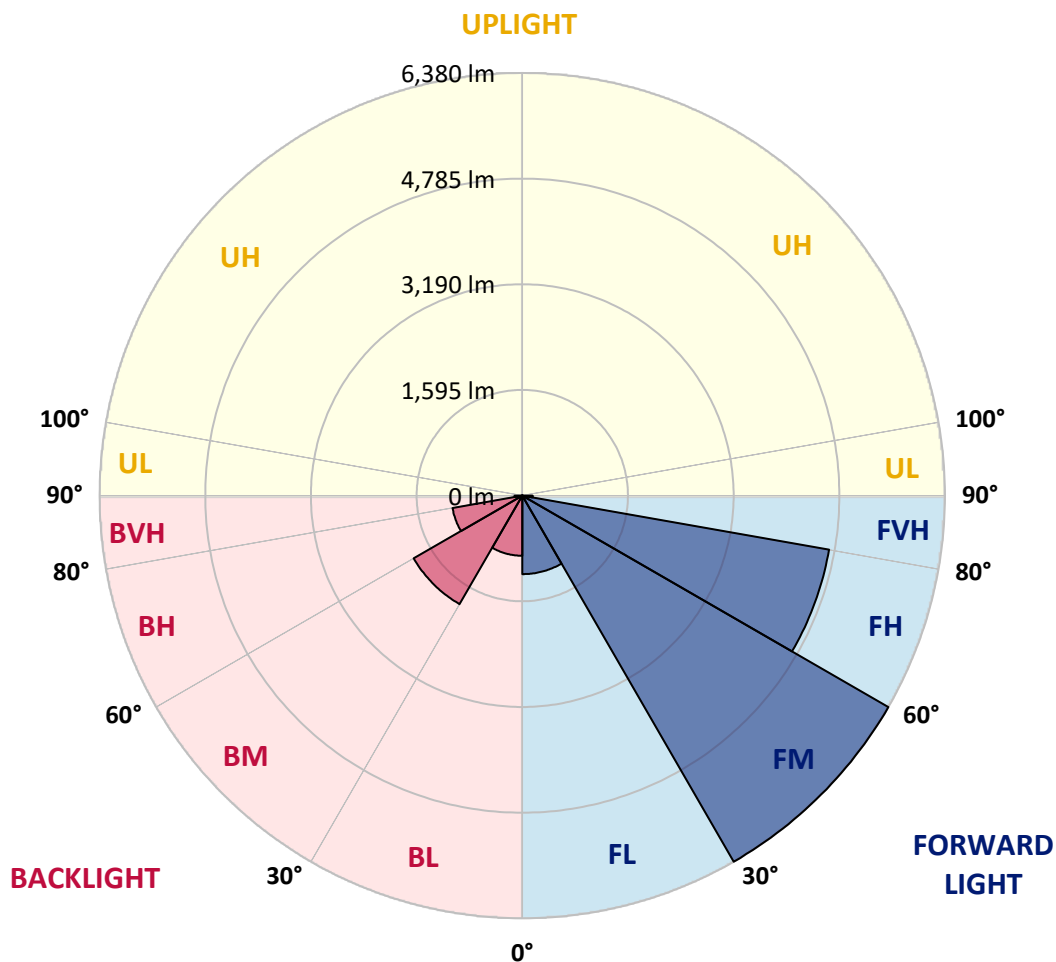
CATALOG NUMBER: GALN-SA4B-827-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1185.0	7.2			
FM	(30°-60°)	6380.3	38.9			
FH	(60°-80°)	4701.7	28.7			G2/5000
FVH	(80°-90°)	156.0	1.0			G2/225
BL	(0°-30°)	907.9	5.5	B2/1000		
BM	(30°-60°)	1892.3	11.5	B2/2500		
BH	(60°-80°)	1069.4	6.5	B3/2500		G3/2500
BVH	(80°-90°)	116.5	0.7			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 III Short





REPORT NUMBER: P453373

CATALOG NUMBER: GALN-SA4B-827-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6
2.5°	2226.3	2225.4	2228.1	2225.4	2227.2	2220.8	2218.1	2219.9	2217.1	2212.6	2204.3
5°	2253.7	2252.8	2253.7	2250.1	2251.9	2248.2	2241.8	2243.7	2239.1	2229.0	2217.1
7.5°	2300.4	2296.7	2296.7	2295.8	2292.1	2286.7	2282.1	2280.3	2275.7	2262.9	2244.6
10°	2360.7	2360.7	2361.7	2354.3	2358.9	2348.9	2344.3	2343.4	2327.8	2311.4	2285.7
12.5°	2440.3	2444.9	2442.1	2438.5	2436.7	2433.0	2417.5	2421.1	2403.7	2375.4	2344.3
15°	2539.1	2546.4	2541.8	2540.0	2535.4	2521.7	2515.3	2512.6	2489.7	2448.6	2407.4
17.5°	2669.9	2660.8	2657.1	2652.5	2633.3	2623.3	2612.3	2610.4	2590.3	2541.8	2477.8
20°	2784.2	2797.0	2789.7	2785.1	2765.9	2746.7	2738.5	2735.8	2718.4	2665.3	2562.9
22.5°	2920.5	2923.3	2926.0	2915.0	2905.9	2891.2	2876.6	2872.0	2865.6	2810.8	2685.4
25°	3065.9	3076.9	3067.8	3056.8	3045.8	3044.9	3058.6	3056.8	3054.1	3001.0	2848.3
27.5°	3302.8	3312.9	3315.7	3303.8	3261.7	3265.3	3296.4	3306.5	3348.6	3260.8	3057.7
30°	3436.4	3446.4	3469.3	3514.1	3580.9	3639.4	3714.4	3737.3	3777.6	3612.0	3306.5
32.5°	3518.7	3522.4	3563.5	3646.8	3847.1	4065.7	4269.6	4277.9	4303.5	4071.2	3534.3
35°	3648.6	3651.3	3684.3	3775.7	4010.8	4374.8	4690.4	4700.5	4679.4	4213.8	3640.4
37.5°	3808.7	3816.0	3837.0	3912.9	4193.7	4633.7	4865.1	4857.8	4671.2	4327.3	3827.9
40°	4041.9	4041.9	4017.2	4119.6	4386.7	4781.9	4926.4	4913.6	4864.2	4655.6	4113.2
42.5°	4247.7	4244.0	4302.6	4372.1	4628.2	5010.5	5183.4	5204.4	5285.8	5068.1	4437.9
45°	4515.7	4532.2	4565.1	4691.3	5038.9	5401.1	5624.3	5644.4	5759.6	5553.8	4817.5
47.5°	4786.4	4791.9	4895.3	5063.6	5547.4	5930.7	6113.6	6146.5	6251.7	6121.8	5226.4
50°	4978.5	5030.6	5196.2	5461.4	6071.5	6576.4	6719.1	6758.4	6944.1	6740.1	5702.9
52.5°	5181.6	5232.8	5434.9	5839.2	6673.4	7236.8	7412.4	7438.9	7631.9	7365.8	6190.4
55°	5355.3	5402.9	5632.5	6174.0	7152.7	7910.9	8229.2	8198.1	8290.5	7847.8	6566.4
57.5°	5383.7	5422.1	5711.2	6388.0	7513.0	8489.0	8945.4	8963.7	8856.7	8208.2	6876.4
60°	5164.2	5242.8	5574.9	6365.1	7674.9	8891.4	9479.6	9492.4	9188.7	8392.9	6999.9
62.5°	4775.5	4767.2	5168.8	5997.4	7448.1	8982.9	9794.2	9780.5	9318.6	8304.2	6880.1
64°	4238.5	4337.3	4712.3	5545.6	7082.2	8842.0	9827.1	9819.8	9256.4	8119.5	6676.1
65°	3911.1	3905.6	4276.0	5176.1	6718.2	8629.8	9768.6	9758.5	9126.5	7953.9	6517.9
67.5°	2823.6	2836.4	3202.2	3994.3	5461.4	7800.2	9387.2	9349.7	8614.3	7405.1	5916.0
70°	1710.4	1717.7	2004.9	2649.8	3920.2	6305.7	8461.5	8463.4	7830.4	6585.6	5035.2
72.5°	900.9	920.2	1035.4	1504.6	2380.9	4424.2	6864.5	7027.4	6722.8	5620.6	3977.9
75°	501.2	504.0	585.4	741.8	1214.7	2476.0	5159.6	5206.3	5322.4	4523.9	2941.6
77.5°	382.3	387.8	413.4	479.3	661.3	1147.9	3122.7	3356.8	3751.0	3189.4	1678.4
80°	310.1	315.6	337.5	376.8	440.0	544.2	1450.7	1576.9	2007.7	1415.9	654.9
82.5°	241.5	237.8	266.2	291.8	320.1	322.0	595.4	658.6	817.7	609.2	283.5
85°	179.3	179.3	202.1	196.7	206.7	188.4	262.5	289.9	327.4	258.8	131.7
87.5°	71.3	78.7	132.6	118.9	92.4	74.1	97.0	102.4	113.4	101.5	54.9
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: P453373
 CATALOG NUMBER: GALN-SA4B-827-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6	2201.6
2.5°	2205.3	2208.0	2201.6	2197.0	2195.2	2192.4	2189.7	2190.6	2194.3	2197.9	2197.0
5°	2216.2	2217.1	2206.2	2200.7	2197.0	2193.4	2193.4	2196.1	2203.4	2208.9	2208.9
7.5°	2243.7	2243.7	2228.1	2218.1	2212.6	2206.2	2204.3	2205.3	2210.7	2218.1	2219.0
10°	2286.7	2283.0	2262.9	2247.3	2237.3	2221.7	2208.0	2200.7	2203.4	2208.0	2208.0
12.5°	2338.8	2328.7	2303.1	2282.1	2257.4	2228.1	2199.8	2185.1	2184.2	2188.8	2187.0
15°	2394.6	2383.6	2347.9	2309.5	2266.5	2223.5	2189.7	2168.7	2152.2	2147.6	2157.7
17.5°	2459.5	2436.7	2387.3	2334.2	2270.2	2214.4	2161.3	2118.4	2089.1	2080.9	2083.6
20°	2538.2	2508.0	2441.2	2358.0	2267.4	2181.5	2099.2	2041.5	1994.0	1979.3	1981.2
22.5°	2647.0	2594.9	2497.0	2369.9	2244.6	2119.3	2004.9	1929.9	1872.3	1849.4	1863.2
25°	2770.5	2713.8	2550.1	2367.1	2185.1	2019.6	1893.4	1795.5	1743.3	1709.5	1716.8
27.5°	2940.6	2840.0	2606.8	2342.5	2100.1	1897.9	1751.6	1659.2	1611.6	1594.3	1602.5
30°	3158.3	3003.8	2668.1	2275.7	1965.6	1744.3	1608.9	1548.5	1520.2	1498.2	1505.5
32.5°	3315.7	3119.0	2681.8	2163.2	1820.2	1604.3	1511.9	1467.1	1436.0	1415.0	1419.6
35°	3428.2	3216.9	2675.4	2025.1	1668.3	1489.1	1435.1	1398.5	1348.2	1302.5	1294.2
37.5°	3579.1	3339.4	2628.7	1874.1	1518.3	1411.3	1372.9	1305.2	1233.0	1171.7	1168.9
40°	3810.5	3483.0	2529.0	1696.7	1390.3	1353.7	1307.1	1219.2	1141.5	1092.1	1088.4
42.5°	4049.2	3615.7	2393.7	1510.1	1285.1	1293.3	1236.6	1149.7	1102.2	1070.2	1066.5
45°	4341.0	3759.3	2247.3	1348.2	1207.4	1236.6	1175.3	1125.0	1096.7	1075.6	1070.2
47.5°	4656.5	3906.5	2082.7	1202.8	1141.5	1184.5	1149.7	1126.9	1111.3	1096.7	1090.3
50°	4996.8	4071.2	1928.1	1085.7	1082.0	1130.5	1147.0	1138.8	1129.6	1125.0	1119.5
52.5°	5370.0	4239.5	1798.2	1003.4	1029.9	1092.1	1147.9	1154.3	1154.3	1151.6	1147.9
55°	5622.4	4356.5	1666.5	936.6	976.9	1061.0	1146.1	1170.8	1179.9	1176.3	1172.6
57.5°	5809.0	4420.6	1501.0	879.0	932.0	1030.8	1136.0	1172.6	1181.7	1186.3	1184.5
60°	5847.4	4361.1	1284.2	818.6	883.6	986.9	1099.4	1145.2	1157.0	1185.4	1188.1
62.5°	5674.6	4178.2	1068.3	759.2	824.1	920.2	1050.0	1114.1	1137.8	1181.7	1186.3
64°	5462.4	3973.3	948.5	721.7	785.7	882.6	1025.3	1105.8	1136.9	1195.5	1199.1
65°	5306.9	3824.2	873.5	697.9	761.0	858.0	1011.6	1108.6	1145.2	1216.5	1222.0
67.5°	4734.3	3311.1	722.6	642.1	702.5	815.9	1014.4	1131.4	1143.3	1224.7	1223.8
70°	3917.5	2636.1	605.5	590.9	645.8	782.0	1003.4	1094.9	1095.8	1149.7	1136.9
72.5°	2933.3	1948.2	525.0	537.8	582.6	701.5	947.6	1045.5	1029.9	1037.2	1024.4
75°	2015.0	1288.8	451.8	481.1	516.8	620.1	868.9	949.4	924.7	915.6	906.4
77.5°	1075.6	712.5	375.9	425.3	449.1	536.0	758.3	836.0	810.4	774.7	762.8
80°	435.4	335.7	302.8	352.1	365.9	431.7	631.1	679.6	660.4	598.2	578.1
82.5°	218.6	201.2	237.8	277.1	278.1	308.2	469.2	515.0	472.0	396.0	378.7
85°	114.3	118.0	163.7	194.8	172.0	166.5	281.7	311.9	286.3	248.8	224.1
87.5°	41.2	47.6	86.0	85.1	60.4	32.0	62.2	30.2	16.5	10.1	12.8
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)