

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: P451977

Luminaire Tested: **GALN-SA2D-827-U-T2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451977  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2D-827-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11501 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2

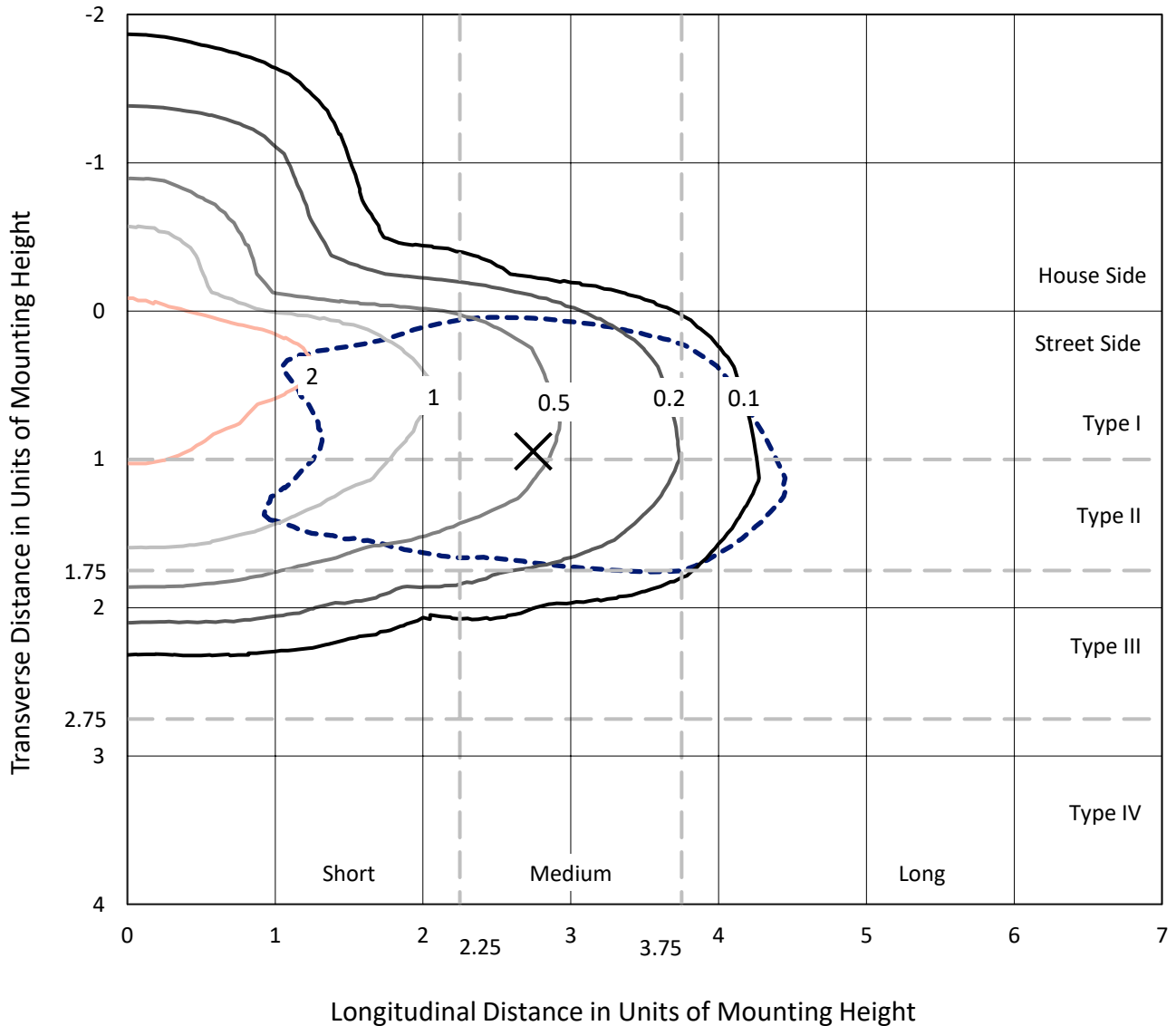
Input Watts (W): 125  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

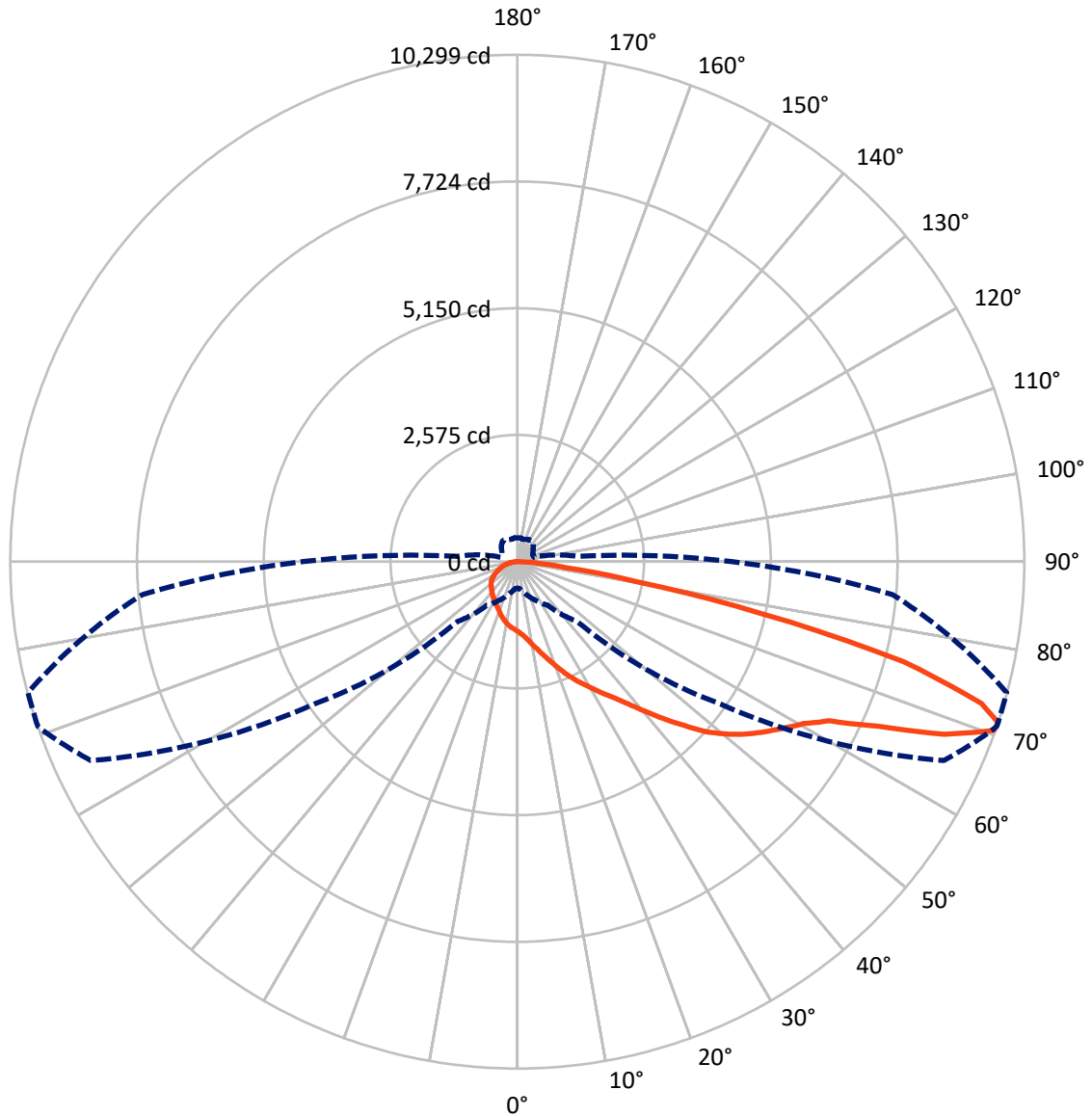
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type II - Medium - N/A

REPORT NUMBER: P451977  
CATALOG NUMBER: GALN-SA2D-827-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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CATALOG NUMBER: GALN-SA2D-827-U-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2068.4	0.0	2068.4
	% Fixture	18.0	0.0	18.0
<b>Street Side</b>	Lumens	9432.6	0.0	9432.6
	% Fixture	82.0	0.0	82.0
<b>Total</b>	Lumens	11501.0	0.0	11501.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	1.2
10°-20°	460.5	4.0
20°-30°	804.7	7.0
30°-40°	1196.9	10.4
40°-50°	1763.4	15.3
50°-60°	2468.8	21.5
60°-70°	2761.3	24.0
70°-80°	1686.7	14.7
80°-90°	217.0	1.9
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°	11501.0	100.0
0°-180°	11501.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P451977

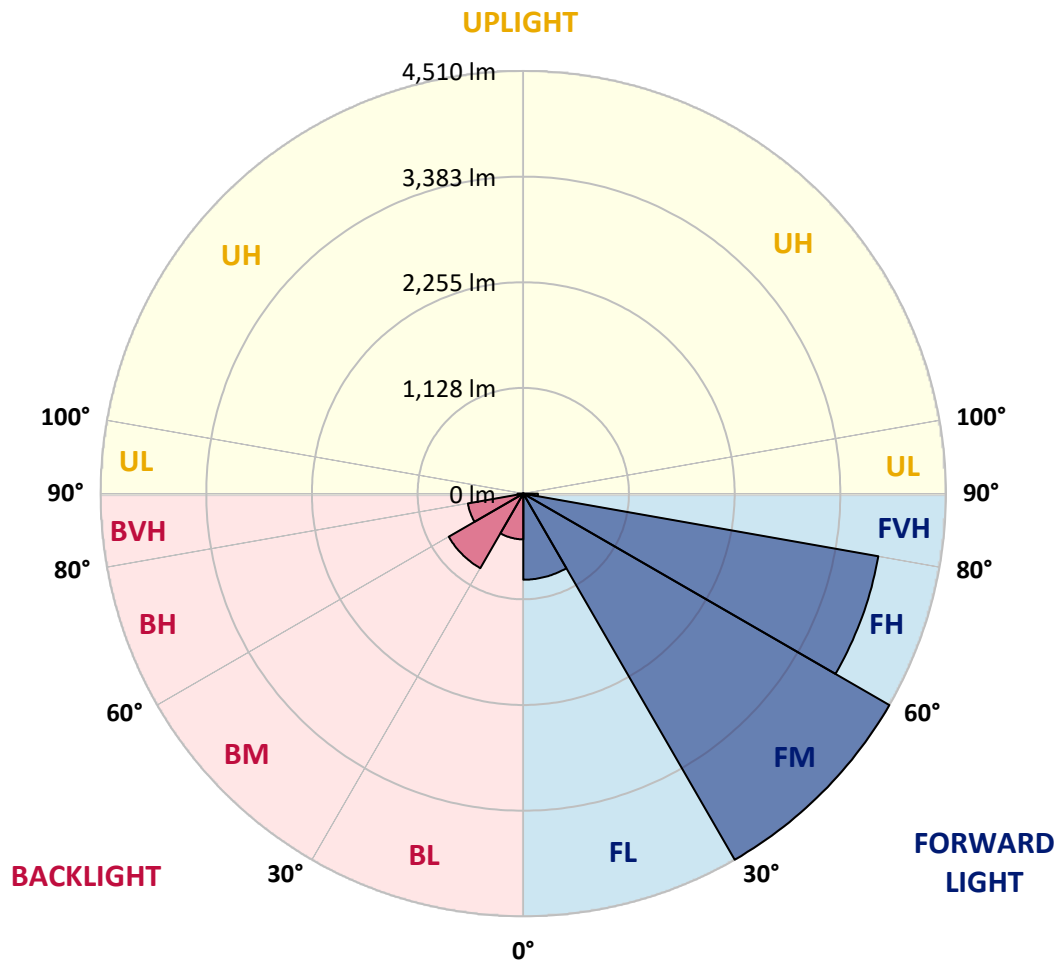
CATALOG NUMBER: GALN-SA2D-827-U-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	918.9	8.0			
FM (30°-60°)	4510.5	39.2			
FH (60°-80°)	3847.1	33.4			G2/5000
FVH (80°-90°)	156.1	1.4			G2/225
BL (0°-30°)	487.9	4.2	B1/500		
BM (30°-60°)	918.7	8.0	B1/1000		
BH (60°-80°)	601.0	5.2	B2/1000		G2/1000
BVH (80°-90°)	60.9	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 Medium





REPORT NUMBER: P451977

CATALOG NUMBER: GALN-SA2D-827-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5
2.5°	1567.0	1559.4	1560.1	1549.3	1535.4	1520.2	1498.8	1479.8	1464.6	1455.8	1429.9
5°	1736.4	1728.8	1719.4	1696.0	1685.9	1648.6	1601.2	1558.2	1525.3	1507.0	1455.1
7.5°	1873.6	1871.7	1869.2	1855.9	1830.0	1778.1	1737.7	1663.1	1614.4	1579.7	1491.2
10°	1958.3	1961.5	1963.4	1965.9	1955.1	1928.0	1872.3	1778.1	1716.2	1672.0	1537.9
12.5°	2001.3	2004.4	2015.2	2038.6	2053.1	2050.0	2004.4	1912.2	1826.8	1768.7	1587.9
15°	2027.8	2032.9	2051.9	2082.8	2131.5	2162.5	2140.4	2055.0	1961.5	1892.6	1647.3
17.5°	2056.9	2062.6	2083.5	2127.7	2191.6	2258.6	2282.6	2209.3	2107.5	2025.3	1713.7
20°	2073.3	2080.9	2110.6	2168.8	2243.4	2340.7	2420.4	2381.8	2270.6	2179.5	1790.2
22.5°	2099.9	2106.2	2131.5	2193.5	2282.6	2404.6	2558.2	2550.0	2452.0	2334.4	1874.2
25°	2172.0	2182.1	2194.7	2232.0	2318.0	2469.7	2672.6	2729.5	2627.7	2496.2	1951.4
27.5°	2307.9	2316.1	2315.5	2320.5	2369.2	2525.9	2771.8	2907.1	2802.2	2660.0	2025.9
30°	2462.7	2465.9	2468.4	2457.0	2467.8	2583.5	2862.9	3082.8	2977.9	2828.1	2091.0
32.5°	2651.1	2657.4	2635.9	2606.9	2598.0	2668.8	2938.1	3258.6	3185.9	2998.8	2155.5
35°	2873.6	2890.0	2846.4	2795.2	2759.2	2791.4	3039.2	3438.1	3398.9	3216.9	2240.9
37.5°	3127.7	3148.0	3107.5	3007.0	2955.8	2964.6	3171.3	3660.0	3668.2	3465.3	2367.9
40°	3335.7	3362.2	3363.5	3221.3	3143.5	3153.6	3338.9	3898.9	3993.1	3772.5	2517.7
42.5°	3472.9	3498.8	3526.0	3442.5	3361.0	3418.5	3534.2	4158.1	4358.5	4145.4	2727.0
45°	3623.3	3646.7	3661.9	3623.9	3578.4	3727.6	3770.0	4433.7	4747.8	4562.0	2955.8
47.5°	3797.8	3823.7	3838.2	3802.2	3785.1	3998.8	4024.1	4691.0	5163.8	4966.6	3208.6
50°	4030.4	4050.0	4042.4	4019.6	4015.8	4206.7	4268.1	4931.8	5507.0	5402.1	3471.0
52.5°	4319.9	4343.3	4351.5	4319.3	4304.7	4355.3	4464.7	5151.1	5819.3	5776.3	3751.0
55°	4495.0	4532.3	4657.5	4708.0	4742.8	4547.5	4676.4	5393.2	6099.3	6170.7	4051.9
57.5°	4270.6	4318.6	4598.7	4851.5	5178.3	5027.9	4976.7	5646.1	6379.3	6553.2	4412.2
60°	3723.2	3733.9	4094.9	4560.7	5218.1	5645.5	5603.1	6048.1	6682.8	6938.8	4886.9
62.5°	2582.8	2605.6	3032.3	3775.6	4726.4	5868.0	6668.9	6742.2	7117.7	7515.9	5582.9
65°	1331.9	1302.2	1690.9	2373.0	3563.3	5339.5	7532.3	8018.4	8060.8	8418.6	6562.7
67.5°	819.9	833.1	1015.2	1385.6	2106.9	3880.6	7441.9	9577.9	9354.7	9526.7	7472.3
70°	615.7	632.1	757.3	948.2	1284.5	2218.7	5984.9	9955.9	10267.5	10223.3	7749.1
71°	535.4	552.5	682.7	862.8	1079.0	1712.4	5042.4	9560.2	10299.1	10291.5	7644.8
72.5°	456.4	467.1	568.9	730.7	909.6	1200.4	3788.3	8574.1	9859.8	10112.0	7272.5
75°	358.4	366.6	412.1	557.5	716.2	737.1	2032.9	6428.0	8098.1	8578.5	6054.4
77.5°	292.0	297.7	321.1	414.0	552.5	522.1	1066.4	4184.0	5073.4	5557.0	3566.4
80°	232.0	238.3	252.2	280.7	414.0	372.3	508.9	2120.1	2450.7	2445.7	1423.5
82.5°	180.2	182.1	198.5	206.1	283.2	264.2	275.6	897.6	994.3	1027.2	513.9
85°	113.8	119.5	175.7	158.0	169.4	154.9	135.9	356.5	439.3	433.0	205.4
87.5°	34.8	36.7	59.4	67.0	75.2	67.6	49.9	104.9	128.3	139.1	51.2
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°	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5	1411.5
2.5°	1419.7	1412.8	1388.1	1367.9	1348.9	1328.1	1310.4	1305.3	1300.9	1299.0	1298.4
5°	1433.0	1412.2	1363.5	1323.7	1292.1	1263.0	1244.6	1236.4	1228.2	1228.2	1230.7
7.5°	1452.0	1414.0	1338.8	1279.4	1239.6	1212.4	1199.1	1197.9	1199.8	1201.7	1202.3
10°	1472.8	1412.8	1302.8	1228.8	1193.4	1180.8	1181.4	1192.2	1202.3	1209.9	1211.1
12.5°	1493.1	1405.2	1260.4	1181.4	1158.7	1161.2	1178.9	1202.9	1222.5	1233.3	1233.9
15°	1515.8	1393.2	1209.2	1136.5	1129.0	1148.6	1181.4	1218.1	1247.8	1265.5	1267.4
17.5°	1534.8	1373.0	1155.5	1092.9	1102.4	1138.4	1184.0	1231.4	1267.4	1289.5	1293.3
20°	1556.3	1347.0	1099.9	1051.2	1078.4	1127.1	1178.9	1230.1	1267.4	1288.9	1293.9
22.5°	1573.3	1310.4	1046.8	1017.1	1056.9	1113.2	1161.8	1202.9	1233.3	1244.6	1252.2
25°	1580.3	1264.2	996.9	989.3	1039.8	1090.4	1123.3	1146.7	1156.1	1154.9	1158.0
27.5°	1576.5	1211.1	953.9	967.1	1018.3	1055.0	1071.4	1069.5	1052.5	1036.7	1044.3
30°	1560.7	1147.9	917.8	944.4	990.5	1010.8	1008.2	983.6	951.3	921.6	923.5
32.5°	1532.3	1079.7	884.3	918.5	951.3	960.2	943.1	910.9	864.7	826.2	820.5
35°	1508.2	1014.6	854.6	888.8	912.1	907.7	891.3	849.6	807.8	773.7	768.0
37.5°	1504.4	958.9	826.2	855.3	868.5	862.2	842.0	806.6	791.4	765.5	762.3
40°	1524.7	919.7	797.1	819.9	826.2	821.1	799.0	778.8	792.7	786.4	786.4
42.5°	1579.7	898.9	771.2	784.5	789.5	793.3	777.5	760.4	777.5	748.4	738.9
45°	1666.9	899.5	747.8	749.7	764.9	778.1	767.4	742.1	733.3	675.1	663.7
47.5°	1795.2	921.0	728.8	716.8	744.0	766.1	751.0	714.3	675.1	636.5	629.6
50°	1945.0	959.6	711.8	682.7	716.2	751.0	739.6	696.6	656.1	632.8	628.3
52.5°	2111.3	1008.2	690.9	644.8	682.1	744.0	742.1	694.1	638.4	622.6	618.8
55°	2316.7	1056.3	665.0	600.5	651.7	738.3	735.2	673.2	634.6	623.3	622.0
57.5°	2555.7	1125.8	627.7	555.6	616.9	714.9	708.0	660.6	622.0	613.8	613.2
60°	2940.6	1233.9	574.6	514.5	581.5	673.8	682.7	639.1	601.8	599.9	599.2
62.5°	3446.9	1385.6	519.6	472.2	540.5	620.7	646.0	610.0	580.3	589.8	591.0
65°	4146.1	1513.3	462.7	436.2	494.9	569.5	611.3	582.8	556.3	574.6	574.6
67.5°	4601.8	1515.8	410.9	398.9	448.8	526.6	574.6	550.6	525.3	556.3	557.5
70°	4507.0	1328.1	367.9	359.7	403.9	480.4	534.1	515.2	486.1	513.9	503.8
71°	4354.0	1223.8	350.8	344.5	386.2	458.3	515.2	499.4	470.3	488.6	482.9
72.5°	4110.0	1062.6	323.0	324.3	359.7	430.5	488.6	472.2	443.1	453.2	451.3
75°	3474.1	928.0	276.2	281.9	309.1	383.1	435.5	422.9	393.2	393.2	391.3
77.5°	2172.0	648.6	229.5	232.6	262.3	328.1	374.2	363.5	335.0	325.5	323.0
80°	810.4	335.0	179.5	183.3	201.6	258.5	309.7	299.6	270.5	259.8	249.7
82.5°	306.6	168.1	132.1	129.0	148.5	197.2	242.7	230.7	208.0	182.1	174.5
85°	115.7	83.4	80.9	78.4	87.2	116.9	150.4	147.9	123.9	105.6	103.7
87.5°	30.3	27.2	31.6	23.4	24.7	22.1	22.8	9.5	4.4	1.9	1.3
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)