

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: P451983

Luminaire Tested: **GALN-SA2D-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
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-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11703 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

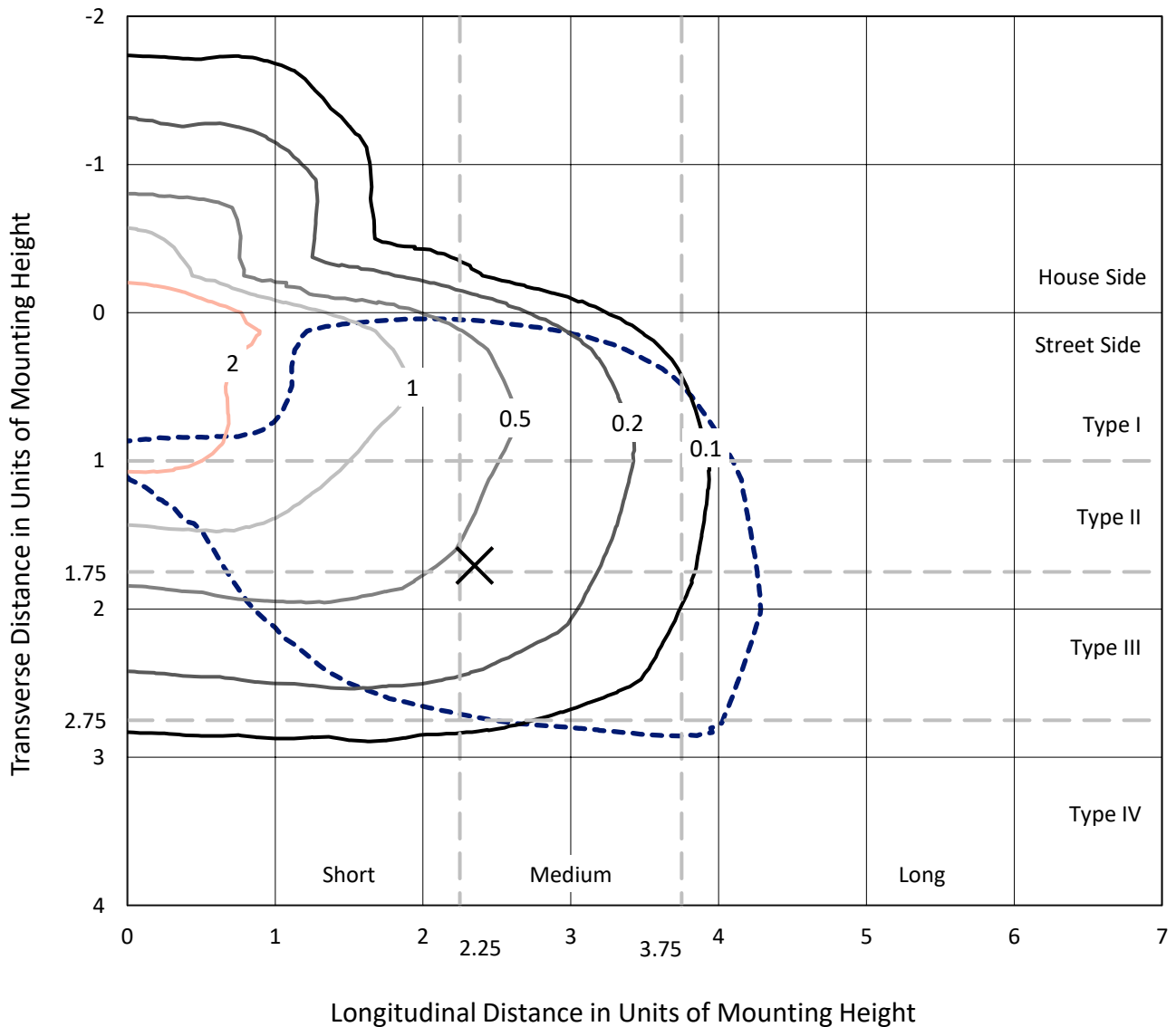
Input Watts (W): 125
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

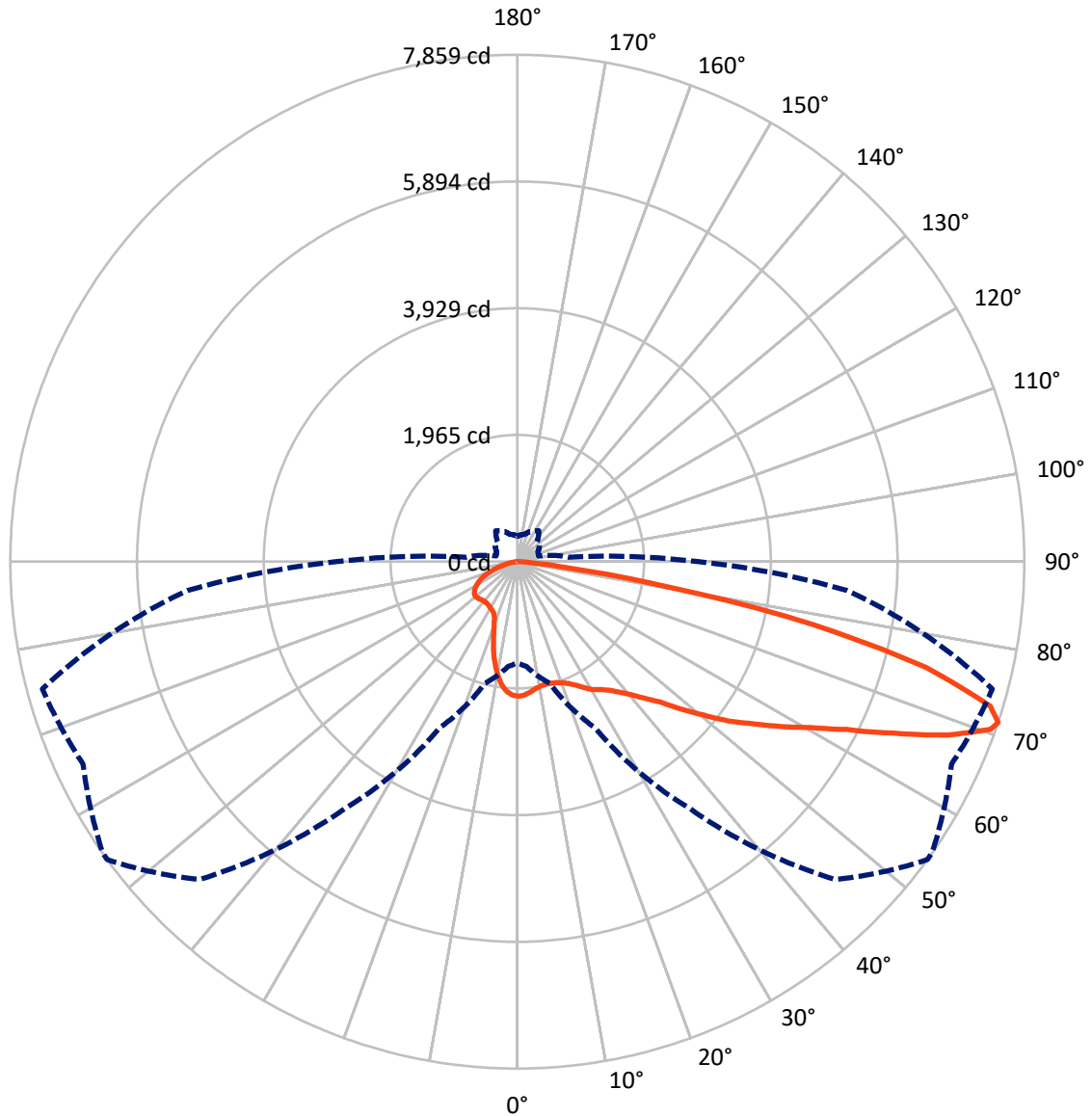
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2112.9	0.0	2112.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	9590.1	0.0	9590.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	11703.0	0.0	11703.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.1	1.6
10°-20°	491.3	4.2
20°-30°	818.1	7.0
30°-40°	1209.7	10.3
40°-50°	1703.8	14.6
50°-60°	2281.5	19.5
60°-70°	2875.7	24.6
70°-80°	1964.1	16.8
80°-90°	172.7	1.5
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°	11703.0	100.0
0°-180°	11703.0	100.0

Coefficient of Utilization



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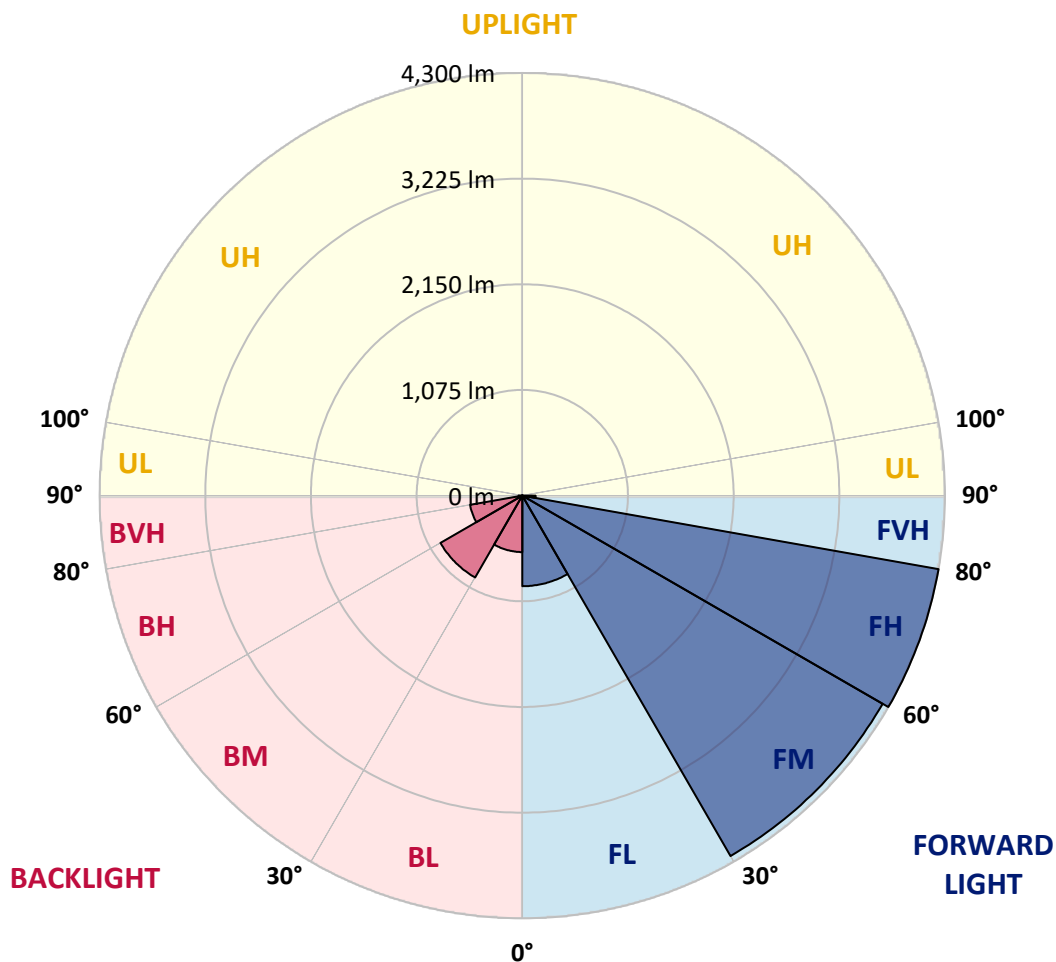
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	921.2	7.9			
FM	(30°-60°)	4233.7	36.2			
FH	(60°-80°)	4300.1	36.7			G2/5000
FVH	(80°-90°)	135.0	1.2			G2/225
BL	(0°-30°)	574.2	4.9	B2/1000		
BM	(30°-60°)	961.3	8.2	B1/1000		
BH	(60°-80°)	539.6	4.6	B2/1000		G2/1000
BVH	(80°-90°)	37.7	0.3			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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0
2.5°	2017.2	2026.7	2029.2	2035.5	2048.8	2059.5	2070.3	2069.0	2084.2	2090.5	2096.2
5°	1927.4	1930.0	1939.4	1952.1	1975.5	2005.2	2034.3	2034.9	2072.2	2101.9	2116.4
7.5°	1861.7	1869.9	1876.2	1889.5	1914.1	1946.4	1992.5	1996.3	2062.7	2121.5	2152.5
10°	1818.7	1828.2	1835.1	1851.6	1876.2	1912.3	1962.2	1969.1	2055.7	2152.5	2206.8
12.5°	1779.5	1789.0	1795.3	1816.8	1849.0	1893.3	1949.5	1957.8	2058.3	2188.5	2266.3
15°	1803.5	1811.1	1808.6	1814.9	1836.4	1887.0	1954.6	1962.8	2067.8	2223.3	2325.0
17.5°	1910.4	1916.7	1895.8	1871.8	1861.7	1899.0	1970.4	1979.3	2086.7	2259.3	2385.1
20°	2067.8	2084.8	2039.3	1985.6	1936.9	1942.0	2003.3	2012.8	2113.3	2295.3	2446.4
22.5°	2272.6	2285.2	2229.6	2141.1	2051.3	2005.2	2052.6	2058.3	2153.1	2342.1	2513.4
25°	2513.4	2521.0	2443.9	2330.1	2200.5	2113.3	2120.2	2130.3	2218.8	2395.2	2572.8
27.5°	2747.3	2771.3	2682.2	2543.1	2372.5	2227.1	2213.2	2219.5	2290.3	2424.9	2613.9
30°	3024.8	3022.9	2928.7	2767.5	2548.8	2351.0	2301.0	2299.8	2328.8	2439.5	2643.6
32.5°	3246.1	3272.0	3179.7	3004.0	2750.5	2479.3	2361.7	2359.2	2358.5	2464.7	2687.9
35°	3497.7	3501.5	3416.8	3239.8	2968.6	2640.5	2446.4	2433.8	2419.2	2519.1	2748.0
37.5°	3722.7	3740.4	3662.7	3464.2	3182.9	2808.0	2562.7	2554.5	2510.3	2613.3	2844.0
40°	3898.5	3911.7	3865.0	3675.9	3394.0	2988.8	2710.7	2695.5	2641.8	2767.5	2972.4
42.5°	3956.0	3983.2	4001.5	3908.6	3636.8	3203.1	2892.7	2873.7	2832.7	3001.4	3120.3
45°	3960.4	4003.4	4100.1	4104.5	3880.8	3459.8	3105.1	3091.8	3088.7	3301.1	3328.3
47.5°	3926.9	3970.5	4133.0	4220.9	4098.2	3718.9	3411.7	3390.8	3392.7	3671.5	3561.5
50°	3846.0	3897.8	4095.1	4295.5	4268.3	3988.2	3735.4	3728.4	3767.6	4094.4	3803.6
52.5°	3693.6	3756.2	4055.9	4342.2	4394.7	4220.2	4103.3	4083.7	4182.9	4553.4	4068.5
55°	3272.0	3366.2	3912.4	4368.2	4514.8	4442.1	4434.5	4469.9	4601.4	5054.0	4359.9
57.5°	3052.0	3122.8	3600.7	4372.6	4666.5	4700.0	4821.4	4830.3	5060.4	5585.7	4689.3
60°	2931.9	2994.5	3430.0	4343.5	4878.3	5019.3	5217.1	5248.7	5508.5	6161.6	5030.6
62.5°	2827.0	2880.7	3327.6	4243.0	5117.2	5492.7	5729.8	5745.0	6017.4	6797.5	5367.6
65°	2579.8	2641.1	3121.6	4142.5	5323.3	6084.4	6410.0	6392.3	6559.2	7346.2	5578.7
67.5°	2246.7	2324.4	2736.6	3795.4	5425.1	6731.1	7176.2	7154.0	7094.0	7705.9	5639.4
70°	1821.2	1862.9	2244.1	3195.5	5018.6	7070.6	7781.1	7757.7	7425.2	7753.3	5352.4
71°	1567.1	1632.2	1954.0	2838.3	4680.4	6966.9	7858.9	7852.6	7425.9	7622.5	5136.2
72.5°	1223.2	1263.0	1547.5	2199.2	3978.1	6377.8	7666.7	7690.7	7264.7	7259.0	4690.5
75°	773.8	791.5	971.0	1294.6	2182.8	4516.7	6544.6	6609.8	6450.4	5941.6	3488.2
77.5°	449.5	472.2	581.6	763.0	943.2	2451.5	4683.0	4753.8	4481.9	3271.4	1428.0
80°	261.7	287.0	383.1	443.1	433.0	909.7	2384.5	2505.2	1940.7	826.2	400.8
82.5°	145.4	162.5	269.3	269.9	230.7	297.1	750.4	785.1	553.8	333.1	163.7
85°	105.6	119.5	173.8	157.4	110.6	127.7	261.1	273.7	223.8	140.3	53.1
87.5°	37.3	53.1	95.5	75.9	30.3	26.6	75.2	61.3	56.9	39.2	12.0
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°	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0	2088.0
2.5°	2099.4	2100.6	2094.3	2082.9	2071.6	2057.0	2040.6	2027.9	2022.2	2021.6	2021.0
5°	2122.1	2125.3	2101.3	2065.9	2026.7	1978.6	1937.5	1890.8	1878.7	1859.8	1865.5
7.5°	2158.8	2156.9	2109.5	2034.3	1942.6	1840.8	1754.8	1704.9	1653.1	1638.5	1639.2
10°	2211.3	2199.2	2109.5	1969.8	1816.8	1665.7	1545.6	1469.7	1428.7	1394.5	1381.9
12.5°	2266.9	2236.5	2089.3	1879.4	1655.0	1469.7	1340.8	1238.4	1211.8	1184.0	1184.6
15°	2320.0	2269.4	2049.4	1752.3	1480.5	1260.5	1135.3	1074.0	1065.8	1069.0	1068.3
17.5°	2368.0	2292.8	1988.7	1610.7	1276.9	1081.0	1014.6	1019.0	1041.1	1057.0	1058.8
20°	2416.7	2306.7	1898.3	1421.1	1084.8	972.2	974.8	1009.5	1043.0	1064.5	1067.7
22.5°	2462.9	2313.0	1792.1	1237.7	945.7	926.1	963.4	1000.7	1033.6	1054.4	1057.6
25°	2493.2	2298.5	1641.7	1046.2	877.4	909.7	948.9	980.5	1008.3	1029.8	1034.8
27.5°	2501.4	2251.7	1455.2	891.3	845.8	893.9	929.9	953.3	974.8	995.0	998.8
30°	2497.0	2182.8	1250.4	800.3	827.5	875.5	903.3	920.4	946.3	962.1	965.3
32.5°	2490.0	2102.5	1036.7	751.6	812.3	858.5	874.9	890.1	889.4	883.1	887.5
35°	2492.6	2006.4	863.5	722.5	799.0	845.8	859.7	840.8	786.4	783.9	781.3
37.5°	2505.8	1911.6	737.7	702.3	792.1	843.9	851.5	764.3	716.2	694.1	688.4
40°	2540.0	1801.0	654.9	687.1	791.5	858.5	814.2	725.7	633.4	590.4	587.3
42.5°	2585.5	1692.3	604.3	677.7	799.0	880.6	799.0	671.3	570.8	545.5	541.8
45°	2653.1	1567.7	576.5	673.2	810.4	888.8	794.0	631.5	545.5	525.3	525.3
47.5°	2729.6	1448.9	561.3	670.1	825.0	883.1	749.1	618.9	533.5	536.1	548.1
50°	2805.5	1345.8	550.0	663.1	837.6	880.0	730.8	618.2	536.7	568.9	590.4
52.5°	2893.3	1273.1	536.1	651.7	837.6	859.7	725.1	630.9	545.5	555.0	564.5
55°	2999.5	1250.4	518.4	627.1	822.4	809.2	721.9	649.2	551.9	529.7	533.5
57.5°	3139.9	1287.1	501.3	596.1	787.7	756.7	720.6	654.3	537.3	519.0	515.2
60°	3303.0	1359.8	496.2	564.5	740.2	711.8	713.1	639.7	517.1	498.1	501.3
62.5°	3417.4	1403.4	493.1	540.5	688.4	662.5	694.7	622.0	508.2	491.8	495.0
65°	3417.4	1350.3	464.0	503.8	621.4	603.1	672.6	599.9	496.9	477.9	474.7
67.5°	3287.8	1195.4	419.7	448.8	547.4	535.4	641.6	573.4	479.8	465.3	457.7
70°	2950.2	906.5	364.1	384.3	453.9	464.6	601.8	537.3	451.4	433.7	422.3
71°	2801.7	789.6	340.7	351.5	417.9	433.7	582.8	522.2	438.7	413.4	393.2
72.5°	2515.3	665.0	305.3	309.8	357.2	385.6	543.0	493.1	414.7	378.7	355.9
75°	1911.0	485.5	245.9	243.4	264.2	306.0	459.6	439.3	363.5	314.8	301.5
77.5°	825.6	264.2	184.0	185.9	179.5	232.0	361.6	377.4	311.6	256.0	244.0
80°	250.3	152.3	125.8	128.3	120.1	155.5	254.8	295.8	250.3	199.1	182.7
82.5°	128.3	91.0	86.0	84.7	76.5	87.9	154.2	202.3	178.9	124.5	110.0
85°	55.6	48.7	42.4	41.1	36.0	31.6	55.0	101.1	94.8	69.5	66.4
87.5°	13.9	12.6	8.2	7.6	4.4	0.6	0.0	0.0	0.0	0.0	0.0
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)