

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: P453378

Luminaire Tested: **GALN-SA4B-827-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453378
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
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-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11970 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

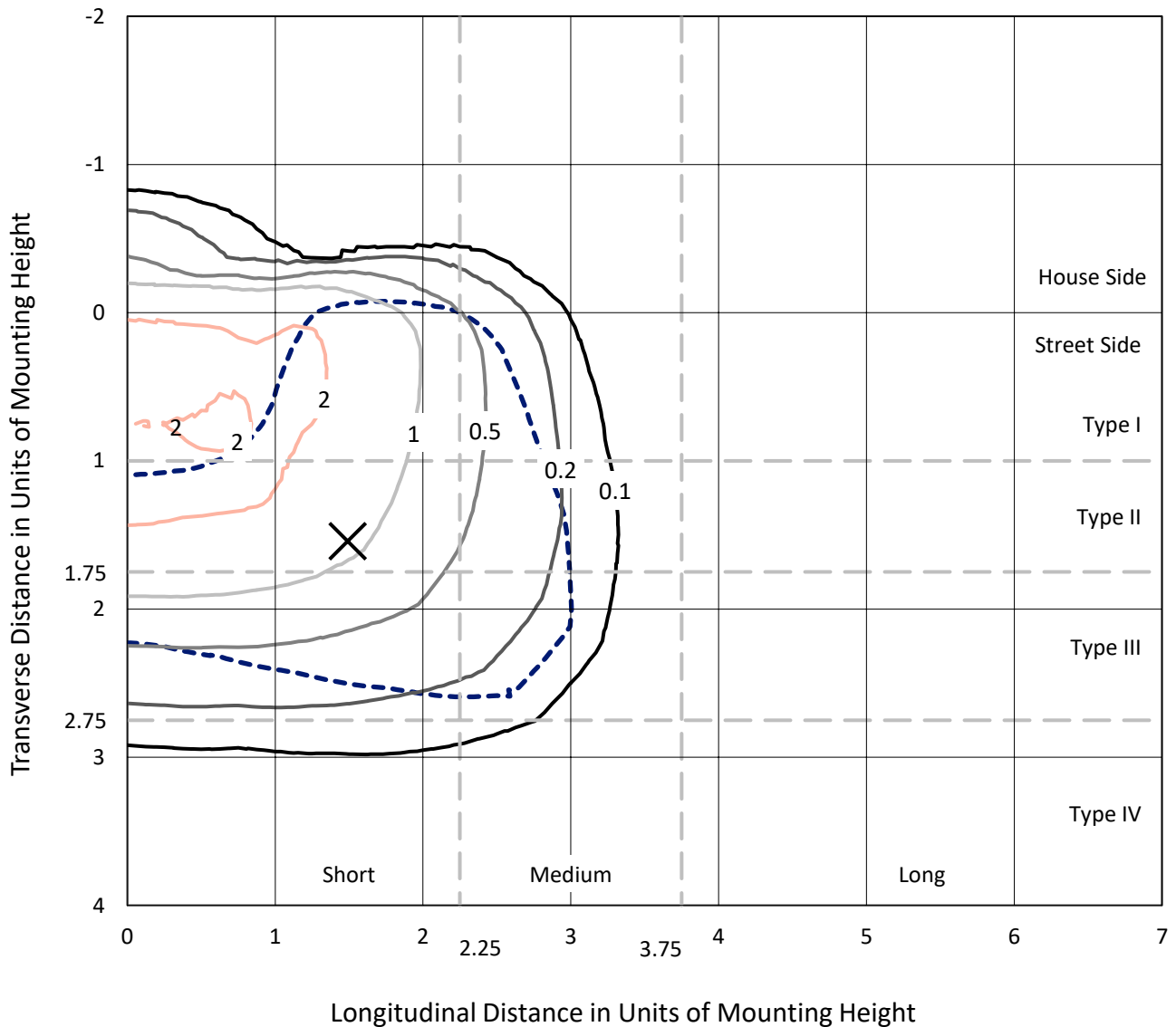
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

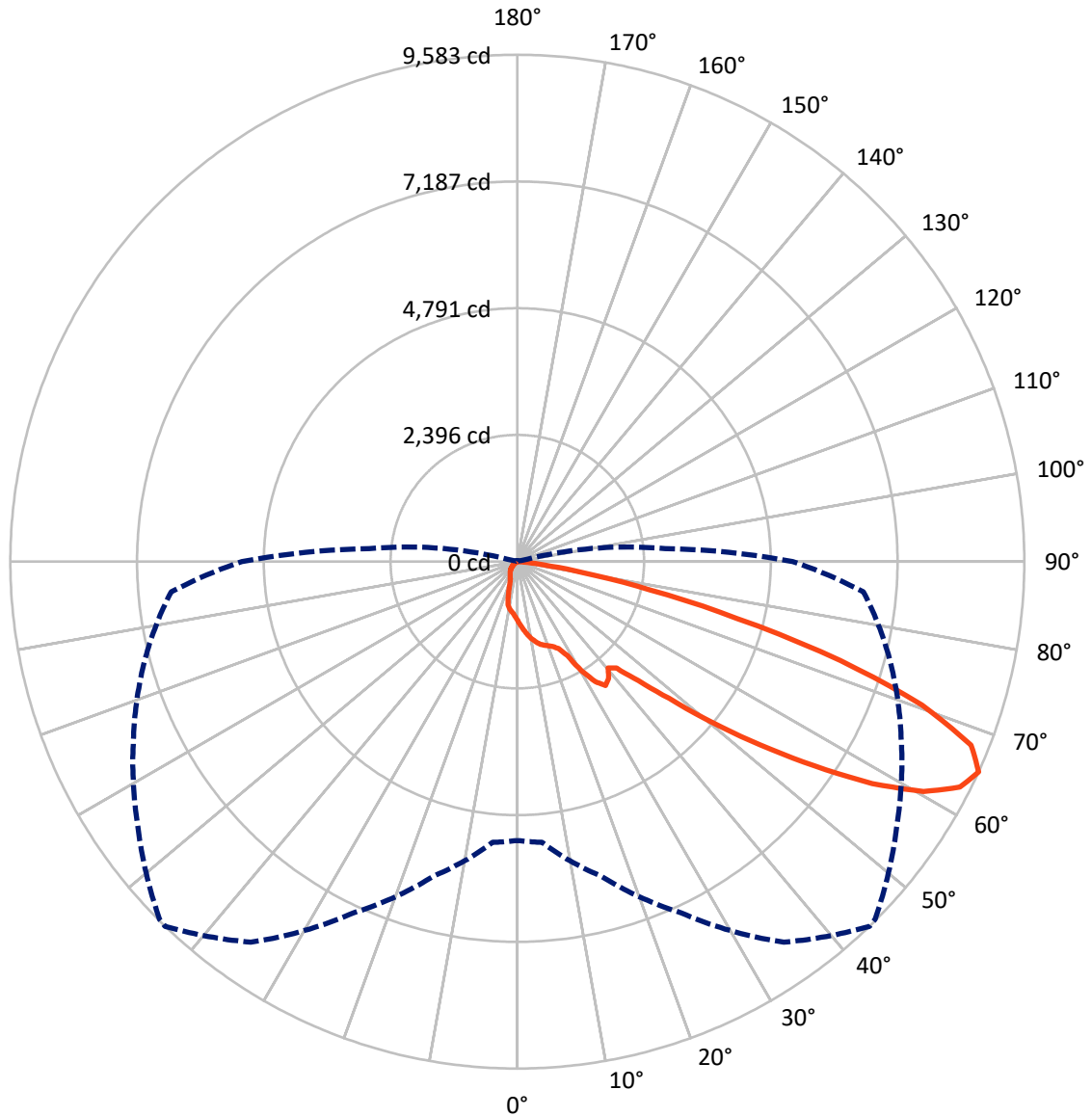
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1102.9	0.0	1102.9
	% Fixture	9.2	0.0	9.2
Street Side	Lumens	10867.1	0.0	10867.1
	% Fixture	90.8	0.0	90.8
Total	Lumens	11970.0	0.0	11970.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	0.9
10°-20°	333.5	2.8
20°-30°	565.5	4.7
30°-40°	940.2	7.9
40°-50°	1641.6	13.7
50°-60°	3207.1	26.8
60°-70°	3721.0	31.1
70°-80°	1355.0	11.3
80°-90°	95.5	0.8
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°	11970.0	100.0
0°-180°	11970.0	100.0

Coefficient of Utilization



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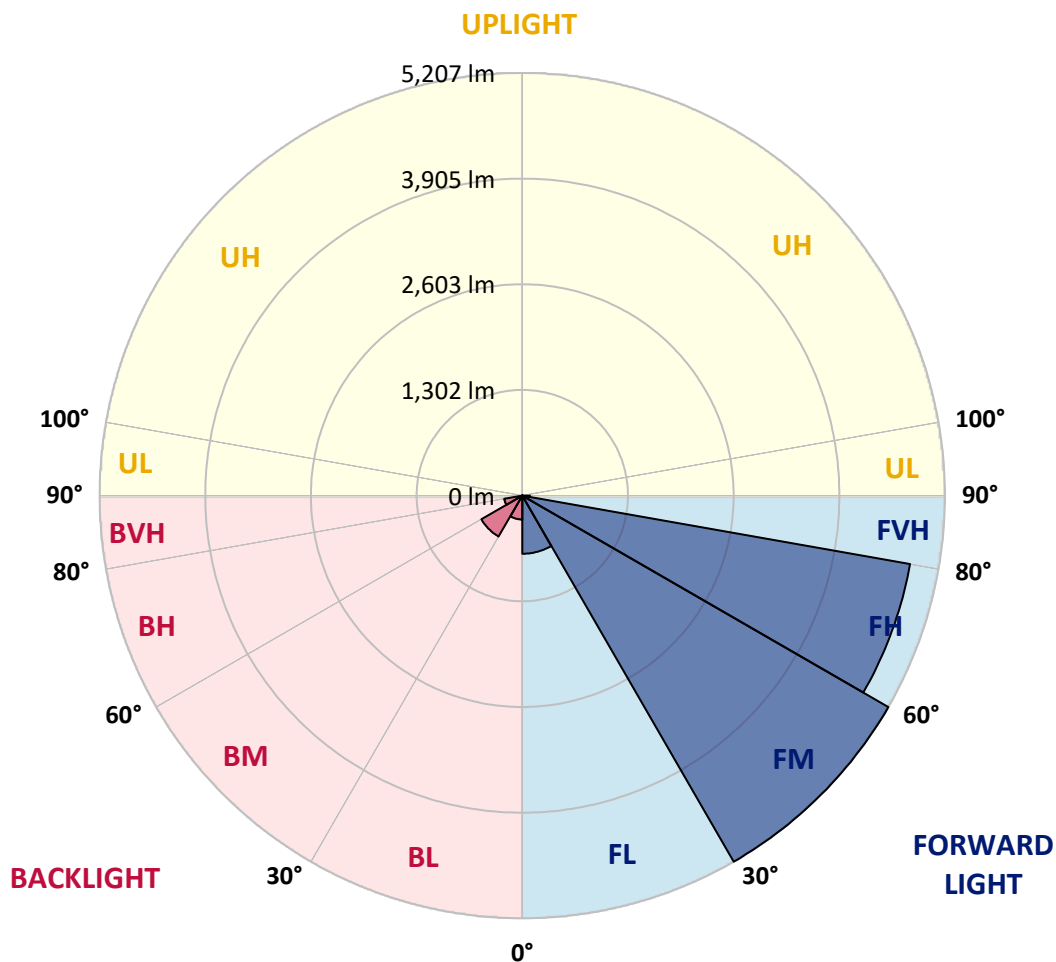
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	715.9	6.0			
FM	(30°-60°)	5207.0	43.5			
FH	(60°-80°)	4850.1	40.5			G2/5000
FVH	(80°-90°)	94.2	0.8			G1/100
BL	(0°-30°)	293.8	2.5	B1/500		
BM	(30°-60°)	581.9	4.9	B1/1000		
BH	(60°-80°)	225.8	1.9	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1
2.5°	1254.0	1248.5	1245.8	1231.1	1220.2	1206.4	1206.4	1189.1	1168.9	1147.0	1126.9
5°	1393.9	1384.8	1372.9	1360.1	1334.5	1297.9	1297.9	1261.3	1219.2	1181.7	1140.6
7.5°	1528.4	1520.2	1500.0	1475.3	1433.3	1394.8	1392.1	1339.1	1288.7	1232.0	1173.5
10°	1646.4	1640.0	1622.6	1575.0	1531.1	1480.8	1479.9	1420.5	1361.9	1292.4	1220.2
12.5°	1728.7	1729.6	1706.7	1661.0	1604.3	1556.7	1553.1	1494.5	1433.3	1358.3	1269.5
15°	1787.2	1787.2	1763.5	1712.2	1661.0	1618.9	1615.3	1564.1	1500.9	1419.5	1323.5
17.5°	1803.7	1809.2	1783.6	1737.8	1696.7	1660.1	1659.2	1616.2	1565.9	1487.2	1378.4
20°	1797.3	1802.8	1782.7	1747.0	1718.6	1697.6	1694.9	1677.5	1630.8	1556.7	1436.9
22.5°	1783.6	1789.1	1774.4	1753.4	1739.7	1746.1	1741.5	1756.1	1731.4	1641.8	1506.4
25°	1786.3	1791.8	1780.8	1768.9	1780.8	1820.2	1832.1	1895.2	1873.2	1749.7	1581.4
27.5°	1872.3	1883.3	1867.7	1873.2	1915.3	2006.8	2029.6	2138.5	2041.5	1886.9	1698.5
30°	2063.5	2056.1	2026.9	2053.4	2199.7	2393.7	2387.3	2369.9	2218.0	2045.2	1837.5
32.5°	2237.2	2230.8	2229.0	2343.3	2608.6	2702.8	2698.2	2529.9	2376.3	2226.3	1974.7
35°	2307.7	2283.0	2277.5	2554.6	2998.2	2873.8	2845.5	2595.8	2568.4	2423.8	2114.7
37.5°	2519.9	2502.5	2417.4	2589.4	2842.7	2801.6	2779.6	2709.2	2773.2	2598.5	2272.9
40°	2957.1	2908.6	2831.8	2663.5	2622.3	2639.7	2661.6	2854.6	3015.6	2837.3	2484.2
42.5°	3500.4	3489.4	3346.7	3033.0	2724.8	2748.5	2776.9	3158.3	3364.1	3196.7	2829.0
45°	4152.5	4168.1	3962.3	3591.9	3187.6	3207.7	3248.9	3606.5	3836.1	3755.6	3371.4
47.5°	4745.2	4733.3	4663.8	4278.8	3905.6	3860.8	3927.5	4181.8	4489.1	4501.9	4044.6
50°	5341.6	5404.7	5301.3	5150.4	4873.3	4779.1	4754.4	4878.8	5347.1	5285.8	4853.2
52.5°	6198.6	6231.5	6037.6	5999.2	6062.3	5756.8	5732.1	5762.3	6181.2	5970.9	5458.7
55°	6737.4	6718.1	6645.9	6945.9	7195.6	6814.2	6783.1	6661.4	6873.6	6454.7	6041.3
57.5°	6907.5	6934.9	7103.2	7645.6	8236.5	7912.7	7856.0	7510.2	7373.0	6905.6	6577.3
60°	6831.6	6881.9	7245.0	8051.7	8871.2	8822.8	8774.3	8193.5	7731.6	7282.5	6953.2
62.5°	6291.0	6361.4	6942.2	7979.5	9086.2	9388.9	9328.6	8619.7	7970.3	7465.4	7019.1
65°	5272.1	5324.2	6158.4	7323.6	8780.7	9582.8	9560.9	8753.3	8007.8	7298.0	6568.1
67.5°	3758.3	3935.8	4708.6	6172.1	7877.0	9251.7	9289.2	8593.2	7655.7	6574.5	5439.5
70°	2362.6	2483.3	3037.6	4418.7	6314.8	8116.7	8240.1	7860.5	6644.1	5124.8	3641.2
72.5°	1126.9	1216.5	1611.6	2797.0	4457.1	6386.1	6484.0	6452.9	5137.6	3228.7	1878.7
75°	502.1	536.0	769.2	1427.8	2877.5	4292.5	4545.8	4587.9	3210.4	1579.6	730.8
77.5°	256.1	257.0	360.4	691.5	1436.9	2561.0	2611.3	2758.6	1740.6	696.1	254.3
80°	136.3	145.4	191.2	326.5	745.4	1261.3	1254.9	1379.3	772.0	341.2	85.1
82.5°	61.3	67.7	107.9	171.0	364.0	478.4	515.9	564.3	331.1	217.7	37.5
85°	18.3	22.0	53.1	86.0	131.7	138.1	154.6	199.4	187.5	154.6	19.2
87.5°	2.7	2.7	22.0	23.8	19.2	24.7	25.6	28.4	60.4	56.7	10.1
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°	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1	1114.1
2.5°	1115.9	1109.5	1086.6	1067.4	1050.9	1040.9	1029.0	1021.7	1018.0	1015.3	1016.2
5°	1120.5	1104.9	1065.6	1034.5	1010.7	985.1	967.7	957.6	953.1	945.8	945.8
7.5°	1146.1	1121.4	1066.5	1018.9	977.8	943.0	910.1	898.2	890.0	888.1	886.3
10°	1182.6	1151.6	1076.5	1010.7	952.2	904.6	857.9	816.8	784.8	765.6	762.8
12.5°	1228.4	1183.6	1092.1	1005.2	930.2	846.1	722.6	639.3	583.6	566.2	568.9
15°	1270.5	1222.0	1107.6	1000.6	890.0	701.5	561.6	466.5	438.1	435.4	436.3
17.5°	1320.8	1263.1	1125.9	994.2	779.3	536.0	417.1	391.5	397.0	406.1	405.2
20°	1372.9	1307.0	1147.9	955.8	622.0	403.4	368.6	371.4	379.6	387.8	389.6
22.5°	1428.7	1357.3	1173.5	863.4	474.7	351.2	349.4	353.1	361.3	370.4	372.3
25°	1505.5	1420.5	1192.7	742.7	359.5	324.7	328.4	334.8	342.1	352.1	354.0
27.5°	1604.3	1505.5	1202.8	585.4	311.0	300.9	301.8	311.0	320.1	329.3	329.3
30°	1732.4	1607.0	1182.6	442.7	287.2	278.1	274.4	279.9	291.8	300.9	301.8
32.5°	1846.7	1703.1	1129.6	338.4	269.8	257.0	247.9	248.8	253.4	258.8	259.8
35°	1961.0	1796.4	1039.0	284.5	251.5	236.9	223.2	215.9	212.2	209.5	212.2
37.5°	2107.4	1912.5	918.3	258.8	236.0	217.7	198.5	182.9	170.1	161.9	163.7
40°	2295.8	2073.5	775.6	242.4	221.3	199.4	173.8	153.7	131.7	124.4	120.7
42.5°	2606.8	2317.7	625.6	228.7	206.7	180.2	148.2	120.7	100.6	93.3	95.1
45°	3097.9	2626.0	482.0	214.0	192.1	159.2	124.4	95.1	78.7	75.0	76.8
47.5°	3749.2	3024.8	371.4	197.6	173.8	136.3	97.9	75.0	64.9	64.0	63.1
50°	4362.0	3396.1	310.1	179.3	151.8	113.4	80.5	63.1	56.7	55.8	55.8
52.5°	4916.3	3662.3	252.4	158.2	128.1	93.3	67.7	55.8	50.3	47.6	47.6
55°	5409.3	3836.1	204.9	132.6	100.6	74.1	58.5	50.3	43.9	40.2	39.3
57.5°	5781.5	3857.1	153.7	106.1	75.0	57.6	50.3	43.9	36.6	32.0	30.2
60°	5940.7	3675.1	113.4	80.5	55.8	45.7	40.2	35.7	27.4	22.9	22.0
62.5°	5780.6	3321.1	84.1	61.3	43.0	33.8	28.4	26.5	19.2	13.7	12.8
65°	5207.1	2809.8	66.8	46.6	32.0	24.7	18.3	17.4	11.9	6.4	5.5
67.5°	4171.7	2200.7	53.1	34.8	22.9	16.5	11.9	11.0	6.4	1.8	1.8
70°	2712.9	1406.7	43.0	25.6	14.6	11.0	7.3	5.5	3.7	0.9	0.0
72.5°	1341.8	657.6	34.8	20.1	10.1	5.5	2.7	1.8	2.7	0.0	0.0
75°	520.4	234.2	25.6	13.7	5.5	2.7	1.8	0.0	0.9	0.0	0.0
77.5°	172.9	77.7	15.5	7.3	3.7	1.8	0.0	0.0	0.0	0.0	0.0
80°	64.0	30.2	8.2	4.6	1.8	0.9	0.0	0.0	0.0	0.0	0.0
82.5°	25.6	11.9	5.5	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.8	7.3	3.7	2.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	5.5	3.7	2.7	1.8	0.9	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)