

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: P454074

Luminaire Tested: **GALN-SA5A-827-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454074
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-SA5A-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA 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: 12179 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

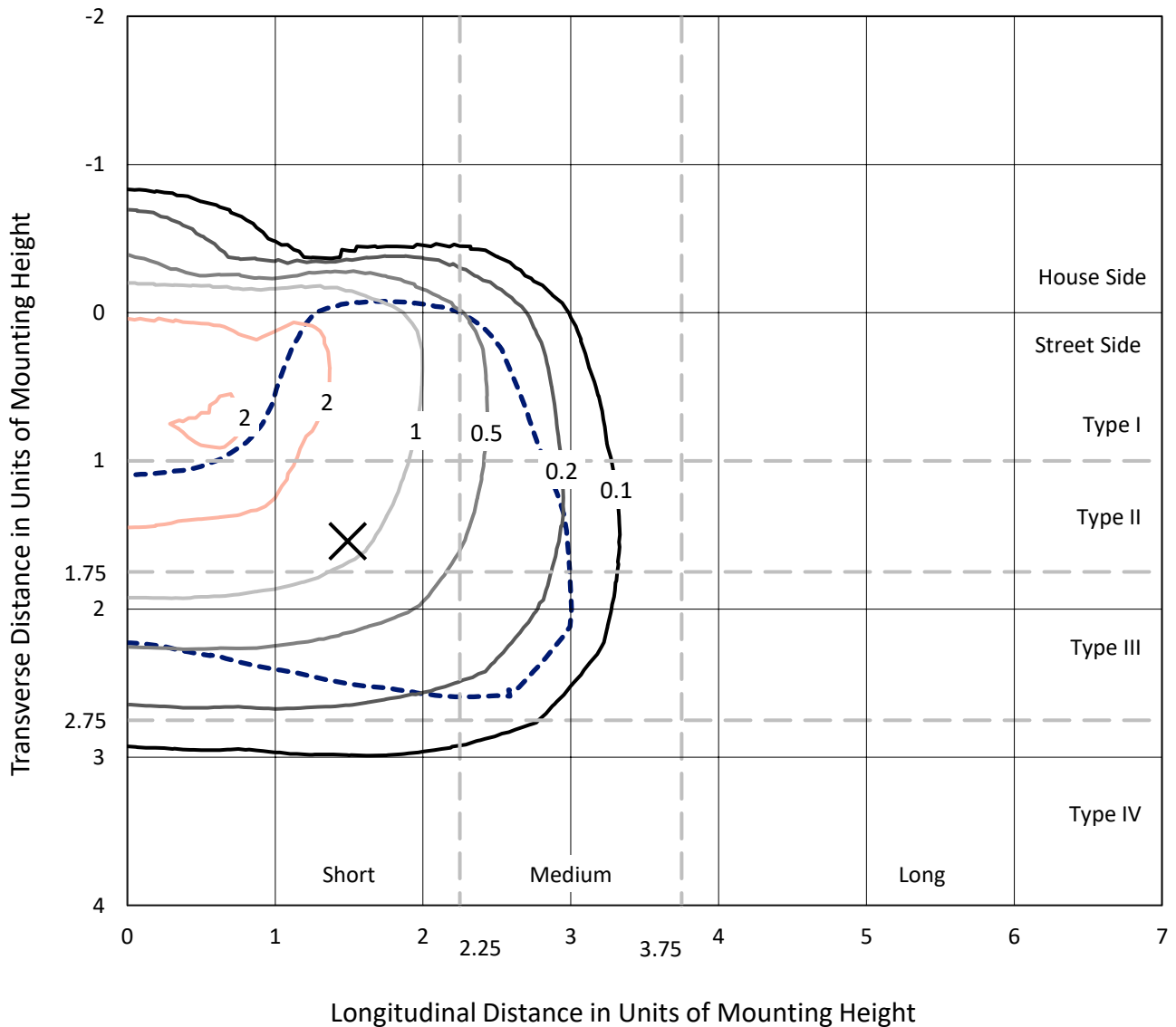
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

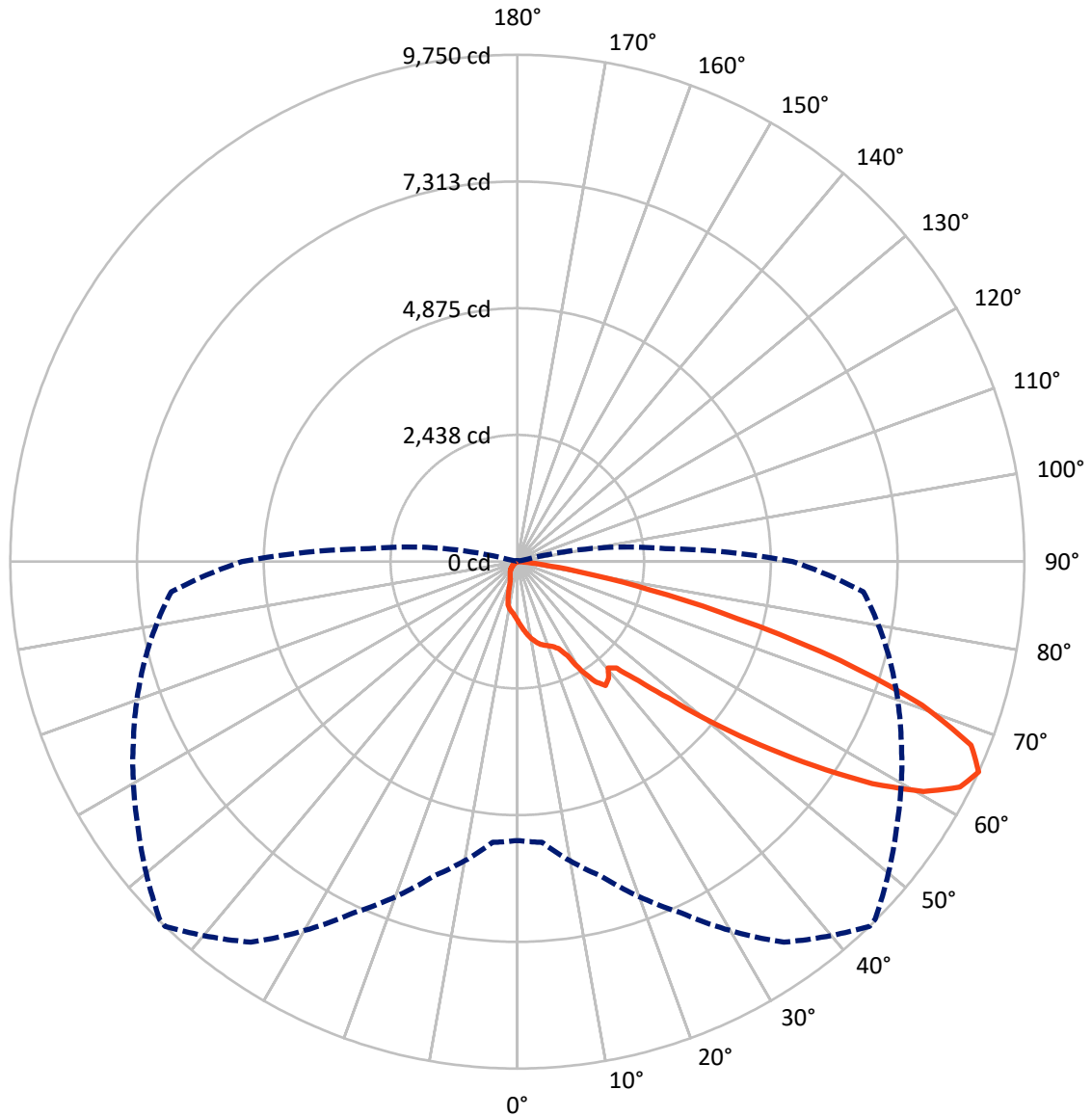
✕ Max cd
 - - - 1/2 Max cd



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	1122.1	0.0	1122.1
	% Fixture	9.2	0.0	9.2
Street Side	Lumens	11056.9	0.0	11056.9
	% Fixture	90.8	0.0	90.8
Total	Lumens	12179.0	0.0	12179.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	0.9
10°-20°	339.3	2.8
20°-30°	575.3	4.7
30°-40°	956.6	7.9
40°-50°	1670.2	13.7
50°-60°	3263.1	26.8
60°-70°	3785.9	31.1
70°-80°	1378.6	11.3
80°-90°	97.1	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°	12179.0	100.0
0°-180°	12179.0	100.0

Coefficient of Utilization



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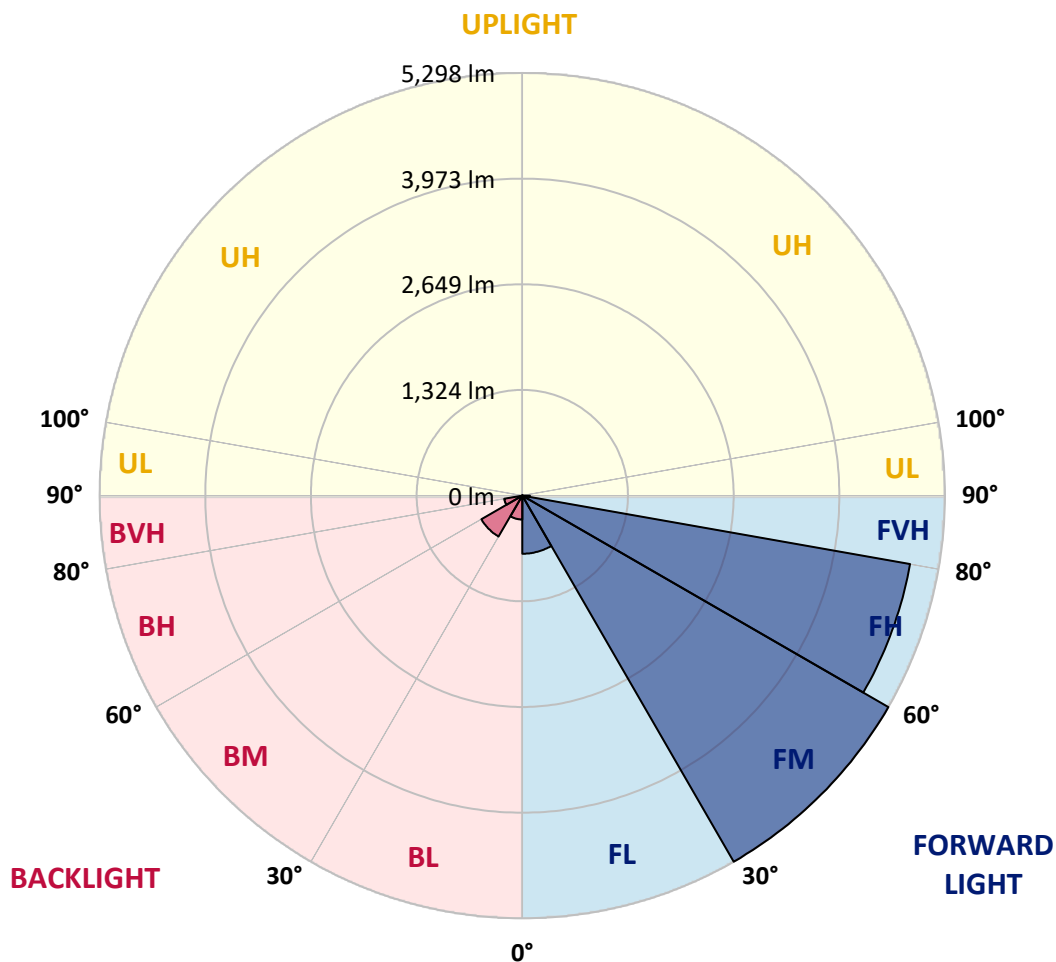
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	728.4	6.0			
FM	(30°-60°)	5297.9	43.5			
FH	(60°-80°)	4934.8	40.5			G2/5000
FVH	(80°-90°)	95.8	0.8			G1/100
BL	(0°-30°)	299.0	2.5	B1/500		
BM	(30°-60°)	592.0	4.9	B1/1000		
BH	(60°-80°)	229.8	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°	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5
2.5°	1275.9	1270.3	1267.5	1252.6	1241.5	1227.5	1227.5	1209.8	1189.3	1167.0	1146.5
5°	1418.3	1409.0	1396.9	1383.8	1357.8	1320.6	1320.6	1283.3	1240.5	1202.4	1160.5
7.5°	1555.1	1546.7	1526.2	1501.1	1458.3	1419.2	1416.4	1362.4	1311.3	1253.6	1194.0
10°	1675.1	1668.6	1650.9	1602.5	1557.9	1506.7	1505.8	1445.3	1385.7	1315.0	1241.5
12.5°	1758.9	1759.8	1736.5	1690.0	1632.3	1583.9	1580.2	1520.6	1458.3	1382.0	1291.7
15°	1818.4	1818.4	1794.2	1742.1	1690.0	1647.2	1643.5	1591.4	1527.2	1444.3	1346.6
17.5°	1835.2	1840.8	1814.7	1768.2	1726.3	1689.1	1688.2	1644.4	1593.2	1513.2	1402.5
20°	1828.7	1834.3	1813.8	1777.5	1748.6	1727.2	1724.4	1706.8	1659.3	1583.9	1462.0
22.5°	1814.7	1820.3	1805.4	1784.0	1770.0	1776.6	1771.9	1786.8	1761.7	1670.5	1532.7
25°	1817.5	1823.1	1811.9	1799.8	1811.9	1851.9	1864.0	1928.3	1905.9	1780.3	1609.1
27.5°	1905.0	1916.2	1900.3	1905.9	1948.7	2041.8	2065.1	2175.8	2077.2	1919.9	1728.2
30°	2099.5	2092.0	2062.3	2089.3	2238.2	2435.4	2428.9	2411.3	2256.8	2080.9	1869.6
32.5°	2276.3	2269.8	2267.9	2384.3	2654.1	2750.0	2745.3	2574.1	2417.8	2265.1	2009.2
35°	2348.0	2322.8	2317.3	2599.2	3050.6	2924.0	2895.2	2641.1	2613.2	2466.2	2151.6
37.5°	2563.9	2546.2	2459.6	2634.6	2892.4	2850.5	2828.2	2756.5	2821.7	2643.9	2312.6
40°	3008.7	2959.4	2881.2	2710.0	2668.1	2685.8	2708.1	2904.5	3068.3	2886.8	2527.6
42.5°	3561.5	3550.3	3405.2	3086.0	2772.3	2796.5	2825.4	3213.4	3422.8	3252.5	2878.4
45°	4225.0	4240.9	4031.5	3654.6	3243.2	3263.7	3305.6	3669.5	3903.0	3821.1	3430.3
47.5°	4828.1	4816.0	4745.3	4353.5	3973.8	3928.2	3996.1	4254.8	4567.5	4580.5	4115.2
50°	5434.9	5499.1	5393.9	5240.4	4958.4	4862.5	4837.4	4964.0	5440.4	5378.1	4937.9
52.5°	6306.8	6340.4	6143.1	6104.0	6168.2	5857.4	5832.2	5862.9	6289.2	6075.1	5554.0
55°	6855.0	6835.4	6761.9	7067.2	7321.2	6933.2	6901.5	6777.7	6993.6	6567.4	6146.8
57.5°	7028.1	7056.0	7227.2	7779.1	8380.3	8050.8	7993.1	7641.4	7501.8	7026.2	6692.1
60°	6950.8	7002.0	7371.5	8192.3	9026.1	8976.8	8927.5	8336.5	7866.6	7409.6	7074.6
62.5°	6400.8	6472.5	7063.4	8118.8	9244.8	9552.9	9491.4	8770.2	8109.5	7595.8	7141.6
65°	5364.1	5417.2	6265.9	7451.5	8934.0	9750.2	9727.8	8906.1	8147.6	7425.5	6682.8
67.5°	3823.9	4004.5	4790.9	6279.9	8014.5	9413.3	9451.4	8743.2	7789.3	6689.3	5534.4
70°	2403.8	2526.6	3090.6	4495.9	6425.0	8258.4	8384.0	7997.8	6760.1	5214.3	3704.8
72.5°	1146.5	1237.7	1639.8	2845.9	4534.9	6497.6	6597.2	6565.6	5227.3	3285.1	1911.5
75°	510.9	545.3	782.7	1452.7	2927.7	4367.4	4625.2	4668.0	3266.5	1607.2	743.6
77.5°	260.6	261.5	366.7	703.6	1462.0	2605.8	2656.9	2806.8	1771.0	708.2	258.7
80°	138.7	148.0	194.5	332.2	758.5	1283.3	1276.8	1403.4	785.4	347.1	86.5
82.5°	62.4	68.9	109.8	174.0	370.4	486.7	524.9	574.2	336.9	221.5	38.2
85°	18.6	22.3	54.0	87.5	134.0	140.5	157.3	202.9	190.8	157.3	19.5
87.5°	2.8	2.8	22.3	24.2	19.5	25.1	26.1	28.8	61.4	57.7	10.2
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°	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5	1133.5
2.5°	1135.4	1128.8	1105.6	1086.0	1069.3	1059.1	1047.0	1039.5	1035.8	1033.0	1033.9
5°	1140.0	1124.2	1084.2	1052.5	1028.3	1002.3	984.6	974.4	969.7	962.3	962.3
7.5°	1166.1	1140.9	1085.1	1036.7	994.8	959.5	926.0	913.9	905.5	903.6	901.8
10°	1203.3	1171.7	1095.3	1028.3	968.8	920.4	872.9	831.0	798.5	778.9	776.1
12.5°	1249.8	1204.2	1111.2	1022.8	946.4	860.8	735.2	650.5	593.7	576.1	578.8
15°	1292.6	1243.3	1127.0	1018.1	905.5	713.8	571.4	474.6	445.8	443.0	443.9
17.5°	1343.8	1285.2	1145.6	1011.6	792.9	545.3	424.4	398.3	403.9	413.2	412.3
20°	1396.9	1329.9	1167.9	972.5	632.8	410.4	375.0	377.8	386.2	394.6	396.4
22.5°	1453.6	1381.0	1194.0	878.5	483.0	357.4	355.5	359.2	367.6	376.9	378.8
25°	1531.8	1445.3	1213.5	755.7	365.7	330.4	334.1	340.6	348.1	358.3	360.2
27.5°	1632.3	1531.8	1223.8	595.6	316.4	306.2	307.1	316.4	325.7	335.0	335.0
30°	1762.6	1635.1	1203.3	450.4	292.2	282.9	279.2	284.8	296.9	306.2	307.1
32.5°	1878.9	1732.8	1149.3	344.3	274.5	261.5	252.2	253.1	257.8	263.4	264.3
35°	1995.3	1827.7	1057.2	289.4	255.9	241.0	227.1	219.6	215.9	213.1	215.9
37.5°	2144.2	1945.9	934.3	263.4	240.1	221.5	201.9	186.1	173.1	164.7	166.6
40°	2335.9	2109.7	789.2	246.6	225.2	202.9	176.8	156.3	134.0	126.6	122.8
42.5°	2652.3	2358.2	636.5	232.7	210.3	183.3	150.8	122.8	102.4	94.9	96.8
45°	3152.0	2671.8	490.4	217.8	195.4	161.9	126.6	96.8	80.0	76.3	78.2
47.5°	3814.6	3077.6	377.8	201.0	176.8	138.7	99.6	76.3	66.1	65.1	64.2
50°	4438.2	3455.4	315.5	182.4	154.5	115.4	81.9	64.2	57.7	56.8	56.8
52.5°	5002.1	3726.2	256.9	161.0	130.3	94.9	68.9	56.8	51.2	48.4	48.4
55°	5503.7	3903.0	208.5	134.9	102.4	75.4	59.6	51.2	44.7	40.9	40.0
57.5°	5882.5	3924.4	156.3	108.0	76.3	58.6	51.2	44.7	37.2	32.6	30.7
60°	6044.4	3739.3	115.4	81.9	56.8	46.5	40.9	36.3	27.9	23.3	22.3
62.5°	5881.6	3379.1	85.6	62.4	43.7	34.4	28.8	27.0	19.5	14.0	13.0
65°	5298.1	2858.9	67.9	47.5	32.6	25.1	18.6	17.7	12.1	6.5	5.6
67.5°	4244.6	2239.1	54.0	35.4	23.3	16.8	12.1	11.2	6.5	1.9	1.9
70°	2760.2	1431.3	43.7	26.1	14.9	11.2	7.4	5.6	3.7	0.9	0.0
72.5°	1365.2	669.1	35.4	20.5	10.2	5.6	2.8	1.9	2.8	0.0	0.0
75°	529.5	238.2	26.1	14.0	5.6	2.8	1.9	0.0	0.9	0.0	0.0
77.5°	175.9	79.1	15.8	7.4	3.7	1.9	0.0	0.0	0.0	0.0	0.0
80°	65.1	30.7	8.4	4.7	1.9	0.9	0.0	0.0	0.0	0.0	0.0
82.5°	26.1	12.1	5.6	3.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.0	7.4	3.7	2.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	5.6	3.7	2.8	1.9	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)