

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: P452216

Luminaire Tested: **GALN-SA3A-827-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA3A-827-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7227 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

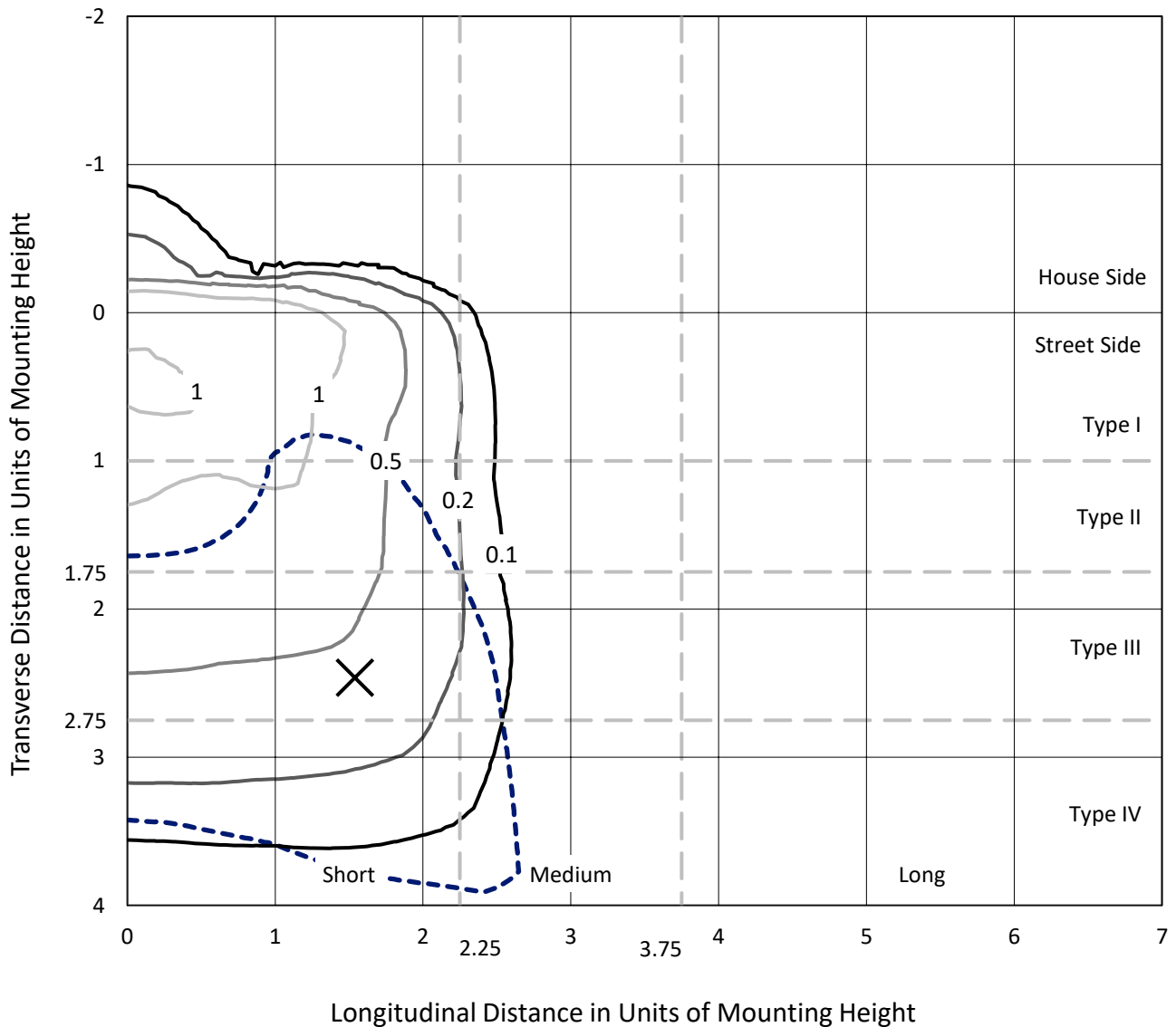
Input Watts (W): 93
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

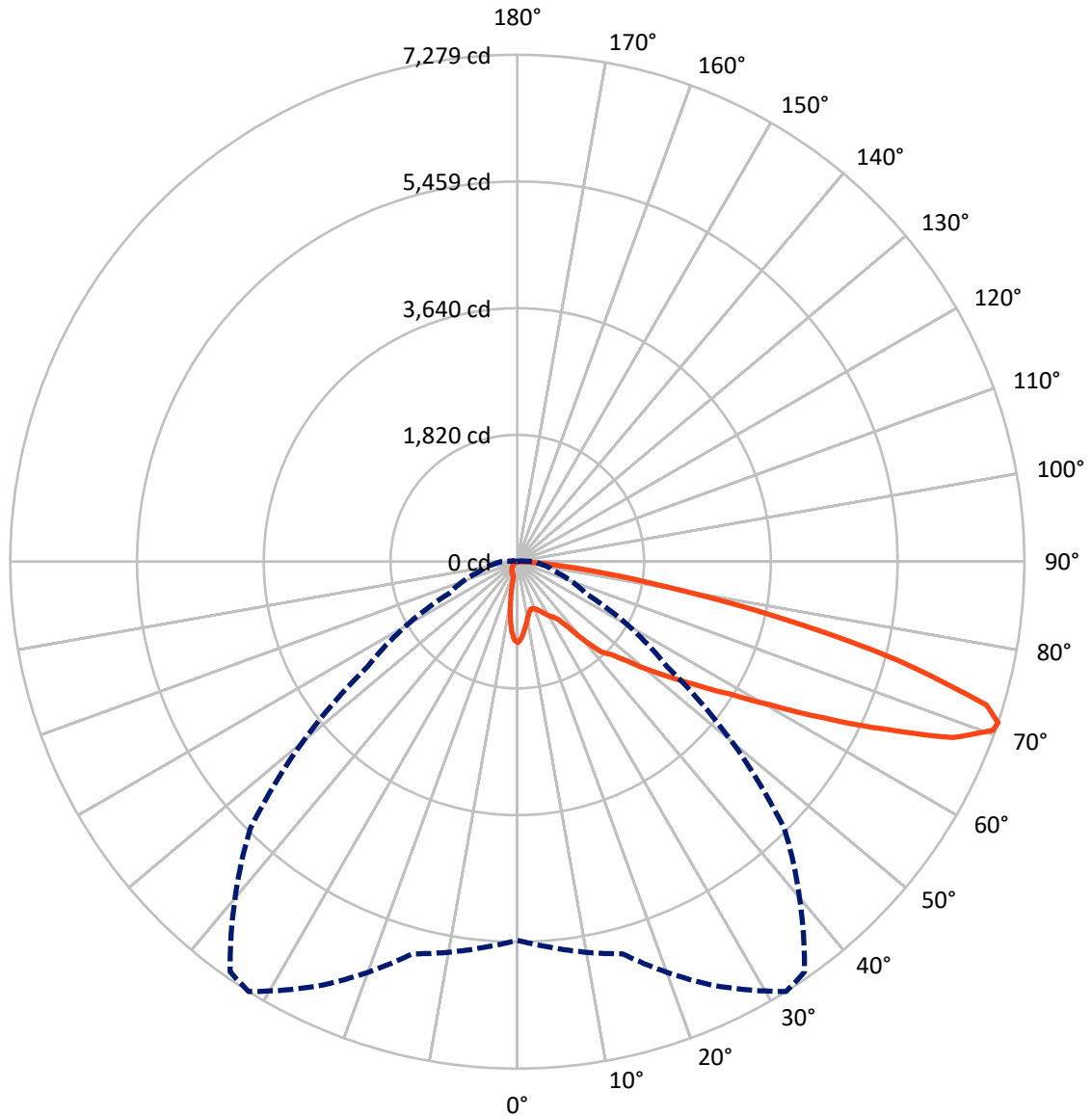
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	605.3	0.0	605.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6621.7	0.0	6621.7
	% Fixture	91.6	0.0	91.6
Total	Lumens	7227.0	0.0	7227.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	1.3
10°-20°	205.1	2.8
20°-30°	319.1	4.4
30°-40°	531.6	7.4
40°-50°	988.8	13.7
50°-60°	1587.6	22.0
60°-70°	2135.4	29.5
70°-80°	1267.0	17.5
80°-90°	97.9	1.4
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°	7227.0	100.0
0°-180°	7227.0	100.0

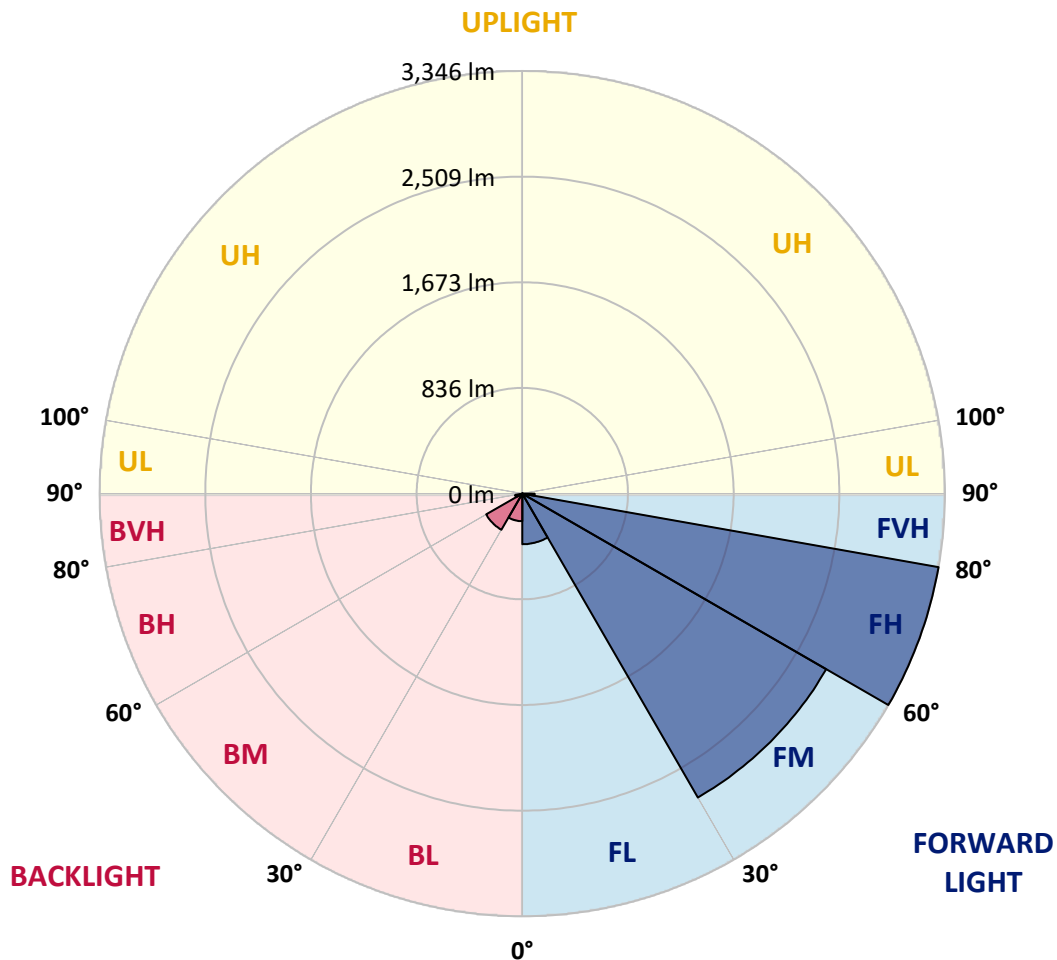


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	400.6	5.5			
FM (30°-60°)	2777.8	38.4			
FH (60°-80°)	3345.7	46.3			G2/5000
FVH (80°-90°)	97.6	1.3			G1/100
BL (0°-30°)	218.1	3.0	B1/500		
BM (30°-60°)	330.2	4.6	B1/1000		
BH (60°-80°)	56.6	0.8	B0/110		G0/110
BVH (80°-90°)	0.4	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2
2.5°	1077.9	1089.0	1087.3	1091.2	1100.6	1104.5	1115.1	1126.7	1142.8	1153.9	1161.1
5°	965.3	973.6	974.7	994.1	1003.6	1014.1	1045.2	1079.0	1116.7	1146.7	1166.7
7.5°	844.9	849.3	858.2	883.7	907.6	918.1	965.3	1024.1	1083.4	1139.5	1175.5
10°	745.6	750.6	766.7	793.9	816.0	829.9	895.4	969.2	1052.4	1135.6	1188.3
12.5°	689.0	691.8	697.9	722.3	750.6	765.6	836.0	920.3	1027.4	1137.3	1209.9
15°	685.1	684.0	676.8	686.8	712.3	727.8	796.6	887.1	1005.2	1142.8	1235.4
17.5°	705.7	702.9	685.7	685.7	706.8	719.5	780.0	869.3	994.1	1155.6	1271.5
20°	737.3	732.8	704.5	702.3	722.8	736.2	790.0	870.4	996.3	1179.4	1319.8
22.5°	777.2	772.2	729.5	730.6	752.8	766.1	818.8	890.4	1010.2	1208.8	1371.4
25°	829.4	823.8	773.3	771.1	794.4	806.1	861.5	925.9	1029.6	1245.4	1439.0
27.5°	898.7	887.1	826.6	823.3	848.2	863.2	913.1	973.6	1064.0	1295.9	1530.0
30°	955.8	943.1	885.4	876.5	903.1	914.8	966.4	1037.9	1131.7	1384.1	1655.9
32.5°	1030.7	1011.9	944.2	920.9	949.2	964.2	1043.5	1157.8	1232.1	1477.3	1805.7
35°	1199.4	1187.7	1105.1	1023.5	1021.9	1040.7	1157.2	1278.7	1335.3	1622.7	2009.9
37.5°	1440.7	1432.4	1344.7	1235.4	1203.8	1194.9	1295.4	1411.9	1500.1	1822.4	2247.3
40°	1720.9	1701.4	1621.0	1528.4	1487.3	1461.2	1458.5	1609.9	1715.3	2093.7	2494.7
42.5°	1921.7	1886.2	1788.5	1781.9	1773.0	1745.8	1667.0	1899.5	1993.2	2385.5	2759.4
45°	2132.5	2078.7	1933.3	1908.4	1905.0	1903.4	1982.1	2242.3	2296.1	2701.7	3031.2
47.5°	2296.1	2253.4	2134.1	2123.1	2136.9	2174.6	2398.8	2606.2	2595.2	2983.5	3259.2
50°	2514.2	2482.0	2349.4	2370.5	2442.0	2503.6	2868.6	3002.9	2840.9	3205.4	3425.1
52.5°	2771.6	2712.2	2589.0	2646.2	2756.0	2858.7	3367.4	3350.2	3013.4	3372.4	3548.8
55°	2994.6	2952.4	2910.3	2969.6	3133.8	3262.0	3817.8	3610.4	3138.8	3506.6	3603.1
57.5°	3371.8	3361.8	3318.6	3379.0	3578.2	3711.3	4221.1	3812.3	3219.3	3576.5	3539.3
60°	3929.9	3913.8	3833.4	3910.5	4170.1	4379.2	4592.8	3993.7	3237.6	3549.3	3355.7
62.5°	4601.1	4546.2	4477.4	4591.2	4947.3	5039.4	4942.9	4101.3	3169.3	3333.0	2913.0
65°	5228.0	5171.4	5173.1	5412.8	5800.5	5863.2	5351.2	4085.2	2969.6	2791.0	2148.6
67.5°	5707.9	5698.5	5766.1	6233.8	6740.8	6697.6	5716.2	3844.5	2377.7	1809.1	1141.7
70°	5732.3	5750.6	5944.8	6734.2	7249.0	7180.2	5685.1	3124.9	1482.3	832.1	449.9
71°	5437.2	5560.3	5828.8	6718.7	7279.0	7189.6	5423.3	2617.3	1087.3	580.3	324.5
72.5°	4633.3	4698.2	5278.5	6323.1	7042.1	6851.2	4759.3	1834.6	696.2	355.0	186.4
75°	2551.9	2711.6	3534.9	4960.6	5632.4	5464.9	3101.6	871.5	347.3	194.2	77.1
77.5°	1214.9	1183.8	1724.7	2950.2	3818.9	3810.1	1562.7	387.2	202.5	131.5	38.8
80°	347.3	390.5	660.2	1402.4	2120.3	2143.6	600.2	187.0	140.4	102.6	20.0
82.5°	104.8	107.1	242.4	620.2	1054.6	994.1	225.2	95.4	101.0	81.5	11.6
85°	18.3	22.7	71.6	218.6	402.2	305.1	56.6	45.5	66.6	53.8	6.7
87.5°	1.1	1.7	23.9	25.0	35.5	20.5	10.0	6.7	14.4	14.4	3.9
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°	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2	1162.2
2.5°	1166.1	1169.4	1167.2	1162.2	1153.9	1143.9	1130.6	1119.5	1110.1	1105.1	1111.2
5°	1173.3	1177.7	1166.7	1141.7	1104.0	1062.9	1016.3	980.3	952.0	943.1	939.8
7.5°	1184.4	1187.2	1157.2	1101.7	1021.9	924.8	839.9	768.3	712.9	696.2	671.8
10°	1198.8	1197.2	1140.6	1037.4	897.0	751.1	619.7	522.0	448.2	421.6	419.4
12.5°	1221.0	1212.1	1119.5	949.7	748.4	557.5	395.0	309.0	262.4	246.9	243.5
15°	1248.8	1227.7	1086.2	847.1	573.1	360.0	243.5	217.5	211.4	210.3	209.1
17.5°	1281.5	1248.2	1042.4	721.2	402.8	233.6	203.6	203.0	203.6	202.5	201.9
20°	1325.9	1269.8	990.2	572.0	266.3	196.9	194.2	194.2	194.7	194.2	194.2
22.5°	1373.0	1295.4	925.9	436.6	200.8	187.0	186.4	187.5	188.6	188.1	188.1
25°	1431.3	1328.6	841.0	299.0	179.7	178.6	179.2	181.4	183.6	184.2	183.6
27.5°	1515.6	1369.7	750.0	205.8	164.8	165.9	171.4	177.0	180.3	180.9	180.9
30°	1610.5	1415.2	631.3	167.0	152.6	152.6	159.2	169.8	177.0	178.1	178.6
32.5°	1732.5	1467.9	499.8	150.3	140.9	139.8	145.9	158.7	172.0	175.9	175.9
35°	1883.4	1530.0	371.7	139.8	132.6	129.8	133.1	143.7	160.9	172.0	173.1
37.5°	2060.4	1588.8	271.8	130.4	124.8	120.9	123.2	131.5	145.3	162.0	166.4
40°	2224.0	1641.0	203.0	122.6	117.1	114.3	115.9	119.8	131.5	147.0	149.8
42.5°	2402.6	1681.5	161.4	114.3	109.3	108.2	108.2	109.8	117.6	126.5	127.0
45°	2580.7	1695.9	135.4	104.3	101.0	102.1	101.5	100.4	103.7	102.6	102.6
47.5°	2707.8	1678.7	112.1	94.9	94.9	96.5	93.8	89.9	88.2	81.5	82.1
50°	2794.9	1616.0	92.1	83.8	88.2	90.4	84.9	78.8	72.7	65.5	63.8
52.5°	2830.9	1504.5	75.4	69.3	78.2	81.0	74.3	67.1	57.7	51.6	49.9
55°	2807.6	1366.9	62.7	56.6	66.0	69.3	62.7	54.4	43.8	37.2	36.1
57.5°	2705.0	1202.7	53.3	44.9	52.7	54.9	50.5	41.6	31.1	24.4	24.4
60°	2527.5	1033.0	43.3	35.5	39.4	42.7	38.3	30.0	21.1	15.0	13.9
62.5°	2167.4	838.8	34.9	27.7	27.7	30.5	26.6	21.6	13.3	7.8	7.2
65°	1565.0	575.3	27.7	20.5	20.0	20.0	16.6	14.4	7.8	3.3	2.2
67.5°	850.4	324.5	22.2	15.5	13.9	13.3	10.5	8.3	3.3	0.6	0.0
70°	334.5	124.8	17.2	10.5	8.9	8.3	5.5	3.9	2.2	0.0	0.0
71°	226.9	86.0	15.0	8.9	7.2	6.1	4.4	3.3	1.7	0.0	0.0
72.5°	129.8	53.3	11.6	6.7	5.5	4.4	3.3	2.2	1.7	0.0	0.0
75°	56.6	27.2	7.2	5.0	3.9	2.8	2.2	1.7	0.6	0.0	0.0
77.5°	28.8	15.0	5.0	3.9	2.2	1.7	1.1	0.6	0.0	0.0	0.0
80°	16.1	7.8	3.3	2.2	1.7	1.1	0.6	0.6	0.0	0.0	0.0
82.5°	8.9	4.4	1.7	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.5	2.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	1.1	0.0	0.0	0.0	0.0	0.6	0.6	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)