

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: P451143

Luminaire Tested: **GALN-SA2A-727-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451143  
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-SA2A-727-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 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: 5538 lumens  
Efficiency: N/A  
Efficacy: 87.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

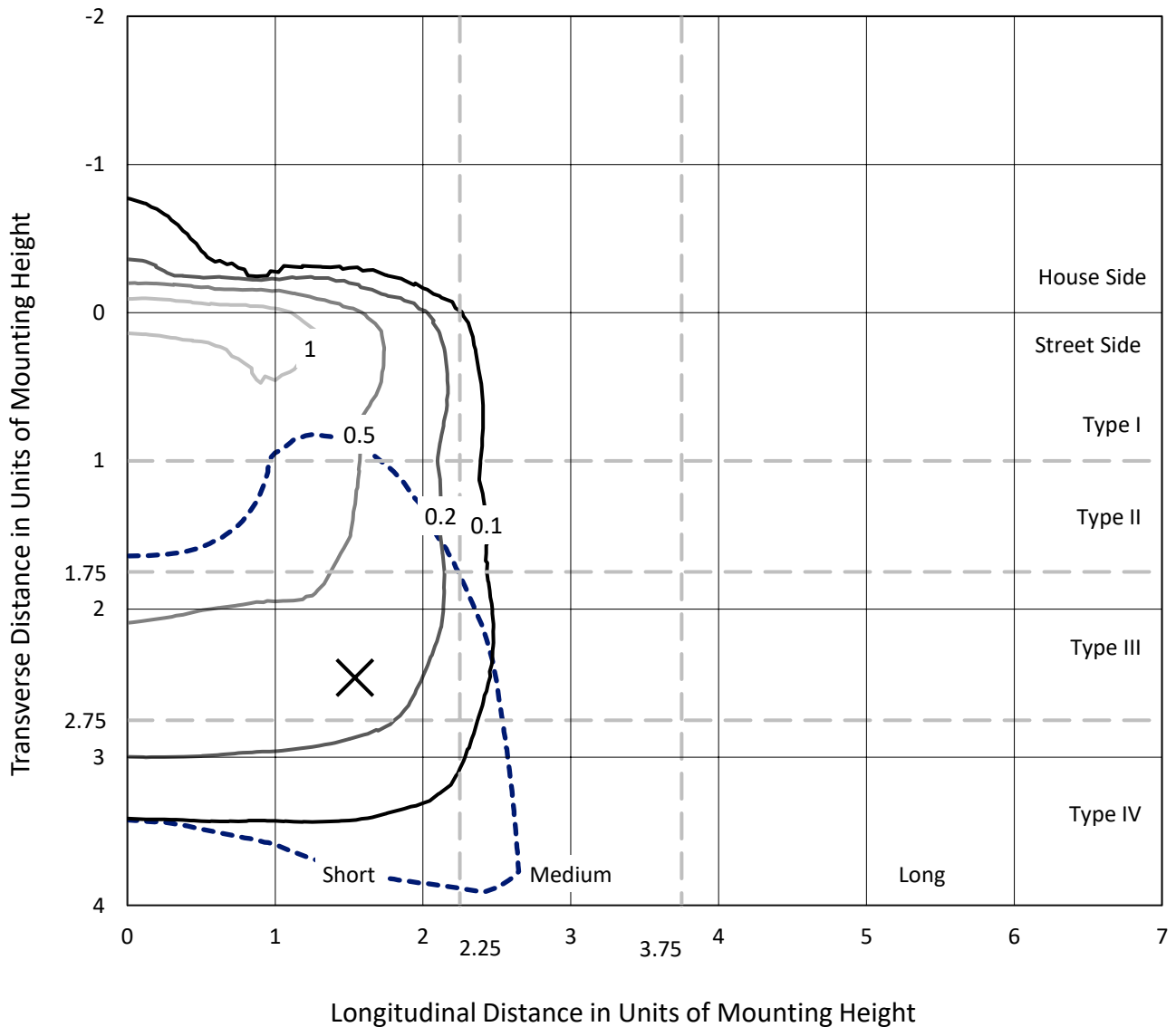
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

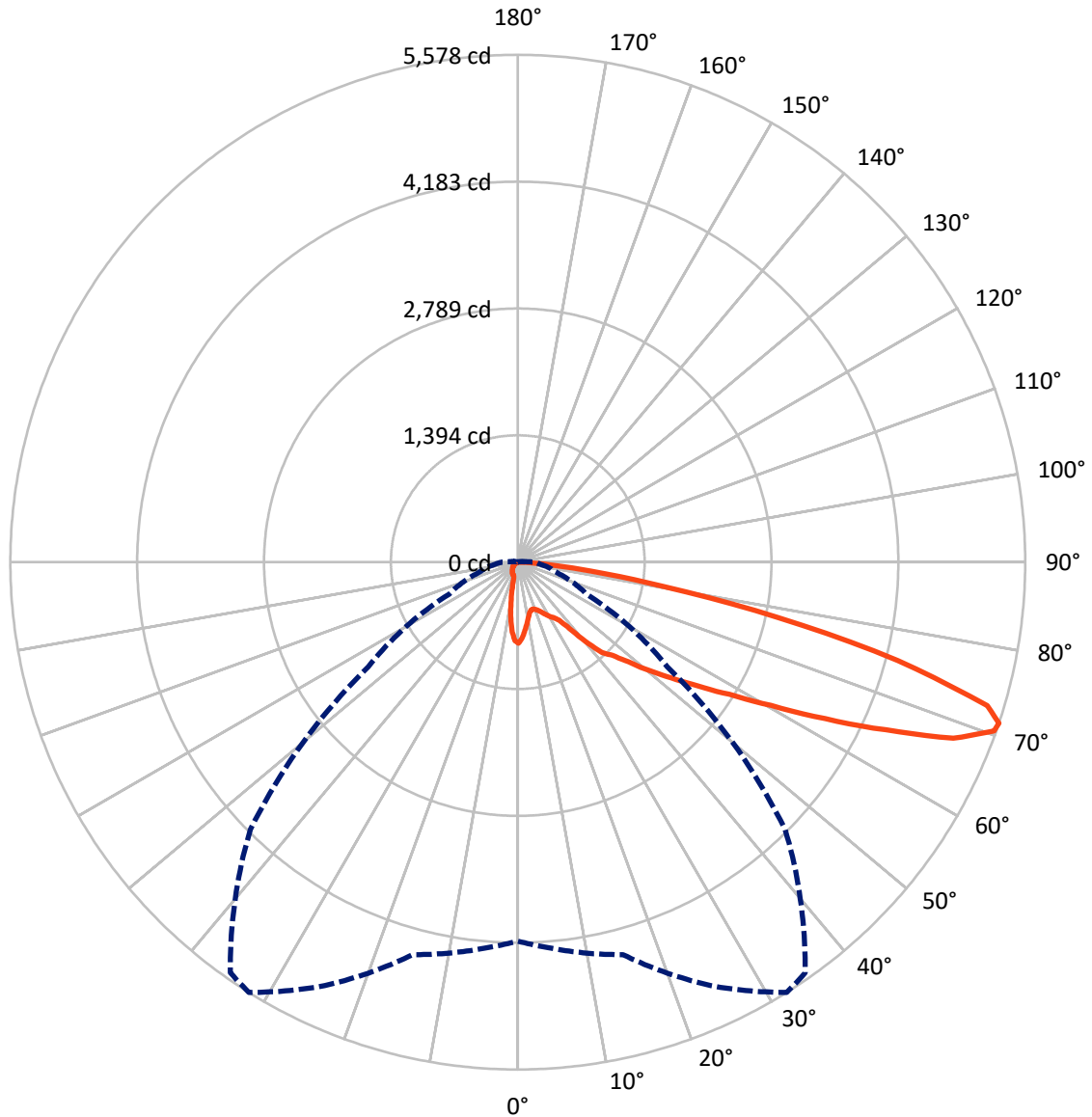
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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
<b>House Side</b>	Lumens	463.9	0.0	463.9
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	5074.1	0.0	5074.1
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	5538.0	0.0	5538.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.4	1.3
10°-20°	157.2	2.8
20°-30°	244.5	4.4
30°-40°	407.3	7.4
40°-50°	757.7	13.7
50°-60°	1216.6	22.0
60°-70°	1636.4	29.5
70°-80°	970.9	17.5
80°-90°	75.0	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°	5538.0	100.0
0°-180°	5538.0	100.0



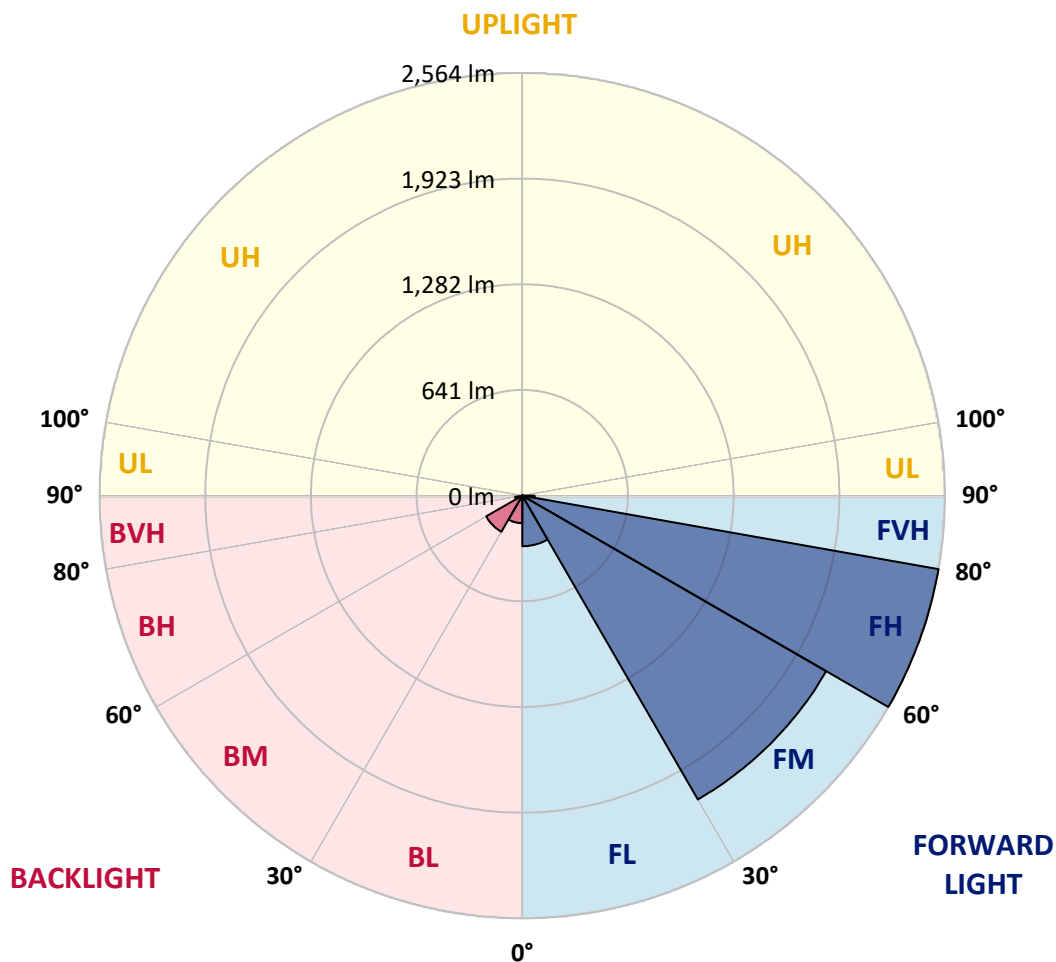
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	307.0	5.5			
FM (30°-60°)	2128.6	38.4			
FH (60°-80°)	2563.8	46.3			G2/5000
FVH (80°-90°)	74.8	1.3			G1/100
BL (0°-30°)	167.1	3.0	B1/500		
BM (30°-60°)	253.0	4.6	B1/1000		
BH (60°-80°)	43.4	0.8	B0/110		G0/110
BVH (80°-90°)	0.3	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6
2.5°	826.0	834.5	833.2	836.2	843.4	846.4	854.5	863.4	875.7	884.2	889.7
5°	739.7	746.1	746.9	761.8	769.0	777.1	800.9	826.8	855.7	878.7	894.0
7.5°	647.4	650.8	657.6	677.2	695.5	703.6	739.7	784.7	830.2	873.2	900.8
10°	571.3	575.2	587.5	608.3	625.3	636.0	686.1	742.7	806.4	870.2	910.6
12.5°	528.0	530.1	534.8	553.5	575.2	586.6	640.6	705.3	787.3	871.5	927.2
15°	525.0	524.2	518.6	526.3	545.8	557.7	610.5	679.7	770.3	875.7	946.7
17.5°	540.7	538.6	525.4	525.4	541.6	551.4	597.7	666.1	761.8	885.5	974.3
20°	565.0	561.6	539.9	538.2	553.9	564.1	605.4	667.0	763.5	903.8	1011.3
22.5°	595.6	591.7	559.0	559.9	576.9	587.1	627.5	682.3	774.1	926.3	1050.9
25°	635.5	631.3	592.6	590.9	608.8	617.7	660.2	709.5	789.0	954.4	1102.7
27.5°	688.7	679.7	633.4	630.9	650.0	661.5	699.7	746.1	815.4	993.0	1172.4
30°	732.5	722.7	678.5	671.7	692.1	701.0	740.5	795.4	867.2	1060.6	1268.9
32.5°	789.8	775.4	723.5	705.7	727.4	738.8	799.6	887.2	944.2	1132.1	1383.7
35°	919.1	910.2	846.8	784.3	783.0	797.5	886.8	979.9	1023.2	1243.4	1540.2
37.5°	1104.0	1097.6	1030.5	946.7	922.5	915.7	992.6	1081.9	1149.5	1396.5	1722.1
40°	1318.7	1303.8	1242.2	1171.2	1139.7	1119.7	1117.6	1233.7	1314.4	1604.3	1911.7
42.5°	1472.6	1445.4	1370.5	1365.4	1358.6	1337.8	1277.4	1455.6	1527.4	1828.0	2114.5
45°	1634.1	1592.9	1481.5	1462.4	1459.8	1458.5	1518.9	1718.3	1759.5	2070.3	2322.8
47.5°	1759.5	1726.8	1635.4	1626.9	1637.5	1666.4	1838.2	1997.1	1988.6	2286.2	2497.5
50°	1926.6	1901.9	1800.3	1816.5	1871.3	1918.5	2198.2	2301.1	2177.0	2456.3	2624.6
52.5°	2123.8	2078.3	1984.0	2027.8	2111.9	2190.6	2580.4	2567.2	2309.2	2584.2	2719.4
55°	2294.7	2262.4	2230.1	2275.6	2401.4	2499.6	2925.6	2766.6	2405.2	2687.1	2761.1
57.5°	2583.8	2576.1	2543.0	2589.3	2741.9	2844.0	3234.6	2921.3	2466.9	2740.7	2712.2
60°	3011.5	2999.1	2937.5	2996.6	3195.5	3355.8	3519.5	3060.3	2480.9	2719.8	2571.5
62.5°	3525.8	3483.7	3431.0	3518.2	3791.1	3861.7	3787.7	3142.8	2428.6	2554.0	2232.2
65°	4006.2	3962.8	3964.1	4147.8	4444.9	4492.9	4100.6	3130.5	2275.6	2138.7	1646.4
67.5°	4373.9	4366.7	4418.6	4776.9	5165.5	5132.3	4380.3	2946.0	1822.0	1386.3	874.9
70°	4392.6	4406.6	4555.4	5160.4	5554.9	5502.1	4356.5	2394.6	1135.9	637.7	344.8
71°	4166.5	4260.8	4466.6	5148.5	5577.8	5509.4	4155.8	2005.6	833.2	444.7	248.7
72.5°	3550.5	3600.2	4044.9	4845.4	5396.3	5250.1	3647.0	1405.8	533.5	272.1	142.8
75°	1955.5	2077.9	2708.8	3801.3	4316.1	4187.7	2376.8	667.8	266.1	148.8	59.1
77.5°	931.0	907.2	1321.7	2260.7	2926.4	2919.6	1197.5	296.7	155.2	100.8	29.8
80°	266.1	299.3	505.9	1074.7	1624.8	1642.6	460.0	143.3	107.6	78.6	15.3
82.5°	80.3	82.0	185.8	475.3	808.1	761.8	172.6	73.1	77.4	62.5	8.9
85°	14.0	17.4	54.8	167.5	308.2	233.8	43.4	34.9	51.0	41.2	5.1
87.5°	0.9	1.3	18.3	19.1	27.2	15.7	7.7	5.1	11.1	11.1	3.0
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°	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6	890.6
2.5°	893.6	896.1	894.4	890.6	884.2	876.6	866.4	857.9	850.6	846.8	851.5
5°	899.1	902.5	894.0	874.9	846.0	814.5	778.8	751.2	729.5	722.7	720.1
7.5°	907.6	909.7	886.8	844.3	783.0	708.7	643.6	588.8	546.3	533.5	514.8
10°	918.7	917.4	874.0	794.9	687.4	575.6	474.8	400.0	343.5	323.1	321.4
12.5°	935.7	928.9	857.9	727.8	573.5	427.2	302.7	236.8	201.1	189.2	186.6
15°	956.9	940.8	832.4	649.1	439.1	275.9	186.6	166.6	162.0	161.1	160.3
17.5°	982.0	956.5	798.8	552.6	308.6	179.0	156.0	155.6	156.0	155.2	154.7
20°	1016.0	973.1	758.8	438.3	204.1	150.9	148.8	148.8	149.2	148.8	148.8
22.5°	1052.1	992.6	709.5	334.6	153.9	143.3	142.8	143.7	144.5	144.1	144.1
25°	1096.8	1018.1	644.5	229.1	137.7	136.9	137.3	139.0	140.7	141.1	140.7
27.5°	1161.4	1049.6	574.7	157.7	126.3	127.1	131.4	135.6	138.2	138.6	138.6
30°	1234.1	1084.4	483.8	128.0	116.9	116.9	122.0	130.1	135.6	136.5	136.9
32.5°	1327.6	1124.8	383.0	115.2	108.0	107.1	111.8	121.6	131.8	134.8	134.8
35°	1443.2	1172.4	284.8	107.1	101.6	99.5	102.0	110.1	123.3	131.8	132.6
37.5°	1578.8	1217.5	208.3	99.9	95.6	92.7	94.4	100.8	111.4	124.1	127.5
40°	1704.2	1257.5	155.6	93.9	89.7	87.6	88.8	91.8	100.8	112.7	114.8
42.5°	1841.1	1288.5	123.7	87.6	83.7	82.9	82.9	84.2	90.1	96.9	97.3
45°	1977.6	1299.5	103.7	79.9	77.4	78.2	77.8	76.9	79.5	78.6	78.6
47.5°	2074.9	1286.4	85.9	72.7	72.7	74.0	71.8	68.9	67.6	62.5	62.9
50°	2141.7	1238.3	70.6	64.2	67.6	69.3	65.0	60.4	55.7	50.2	48.9
52.5°	2169.3	1152.9	57.8	53.1	59.9	62.1	57.0	51.4	44.2	39.5	38.3
55°	2151.5	1047.5	48.0	43.4	50.6	53.1	48.0	41.7	33.6	28.5	27.6
57.5°	2072.8	921.6	40.8	34.4	40.4	42.1	38.7	31.9	23.8	18.7	18.7
60°	1936.8	791.5	33.2	27.2	30.2	32.7	29.3	23.0	16.2	11.5	10.6
62.5°	1660.9	642.8	26.8	21.3	21.3	23.4	20.4	16.6	10.2	6.0	5.5
65°	1199.2	440.8	21.3	15.7	15.3	15.3	12.8	11.1	6.0	2.6	1.7
67.5°	651.7	248.7	17.0	11.9	10.6	10.2	8.1	6.4	2.6	0.4	0.0
70°	256.3	95.6	13.2	8.1	6.8	6.4	4.3	3.0	1.7	0.0	0.0
71°	173.9	65.9	11.5	6.8	5.5	4.7	3.4	2.6	1.3	0.0	0.0
72.5°	99.5	40.8	8.9	5.1	4.3	3.4	2.6	1.7	1.3	0.0	0.0
75°	43.4	20.8	5.5	3.8	3.0	2.1	1.7	1.3	0.4	0.0	0.0
77.5°	22.1	11.5	3.8	3.0	1.7	1.3	0.9	0.4	0.0	0.0	0.0
80°	12.3	6.0	2.6	1.7	1.3	0.9	0.4	0.4	0.0	0.0	0.0
82.5°	6.8	3.4	1.3	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.9	0.0	0.0	0.0	0.0	0.4	0.4	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)