

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: P450361

Luminaire Tested: **GALN-SA1A-827-U-T4FT**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450361  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1A-827-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3394 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

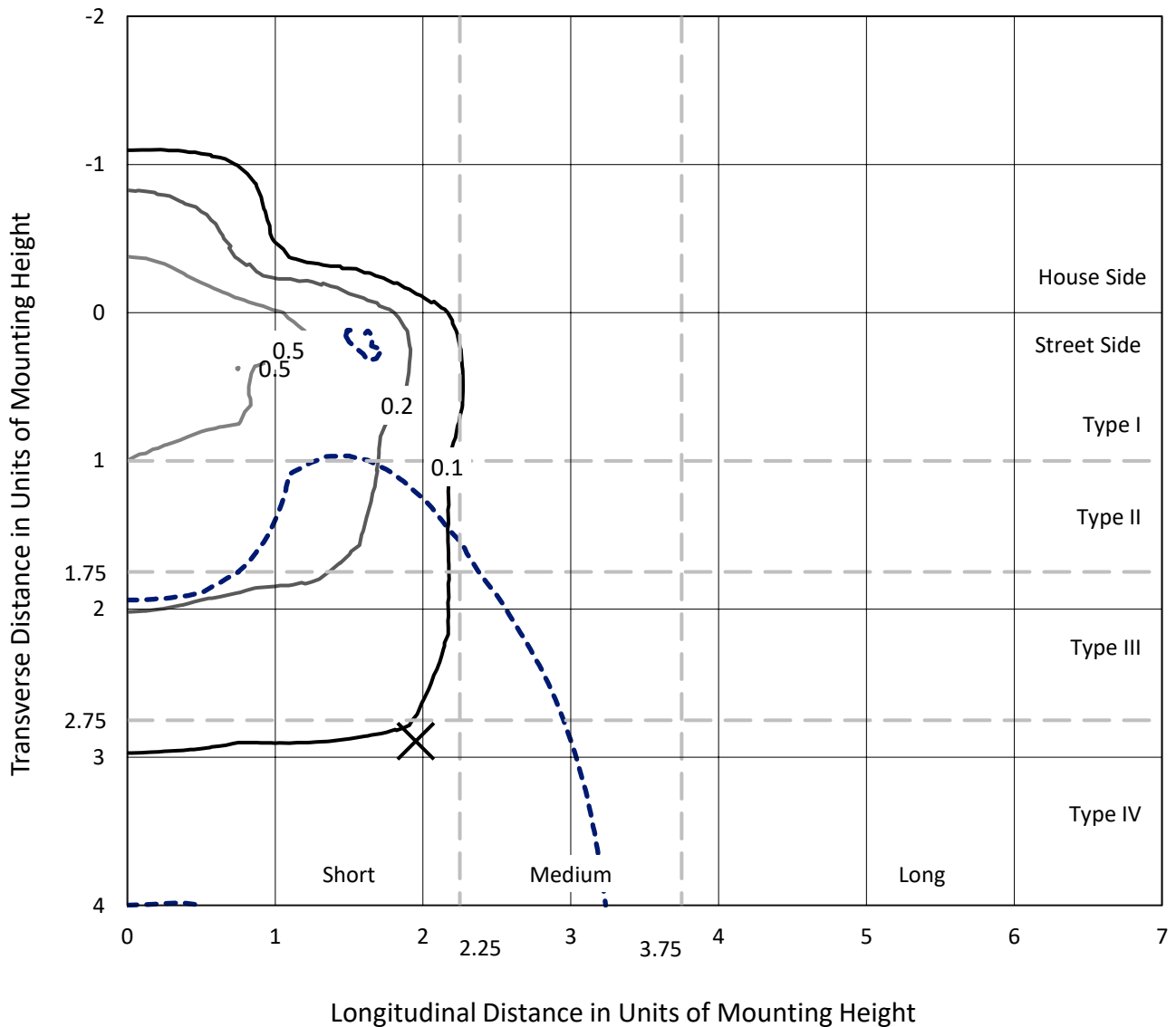
Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

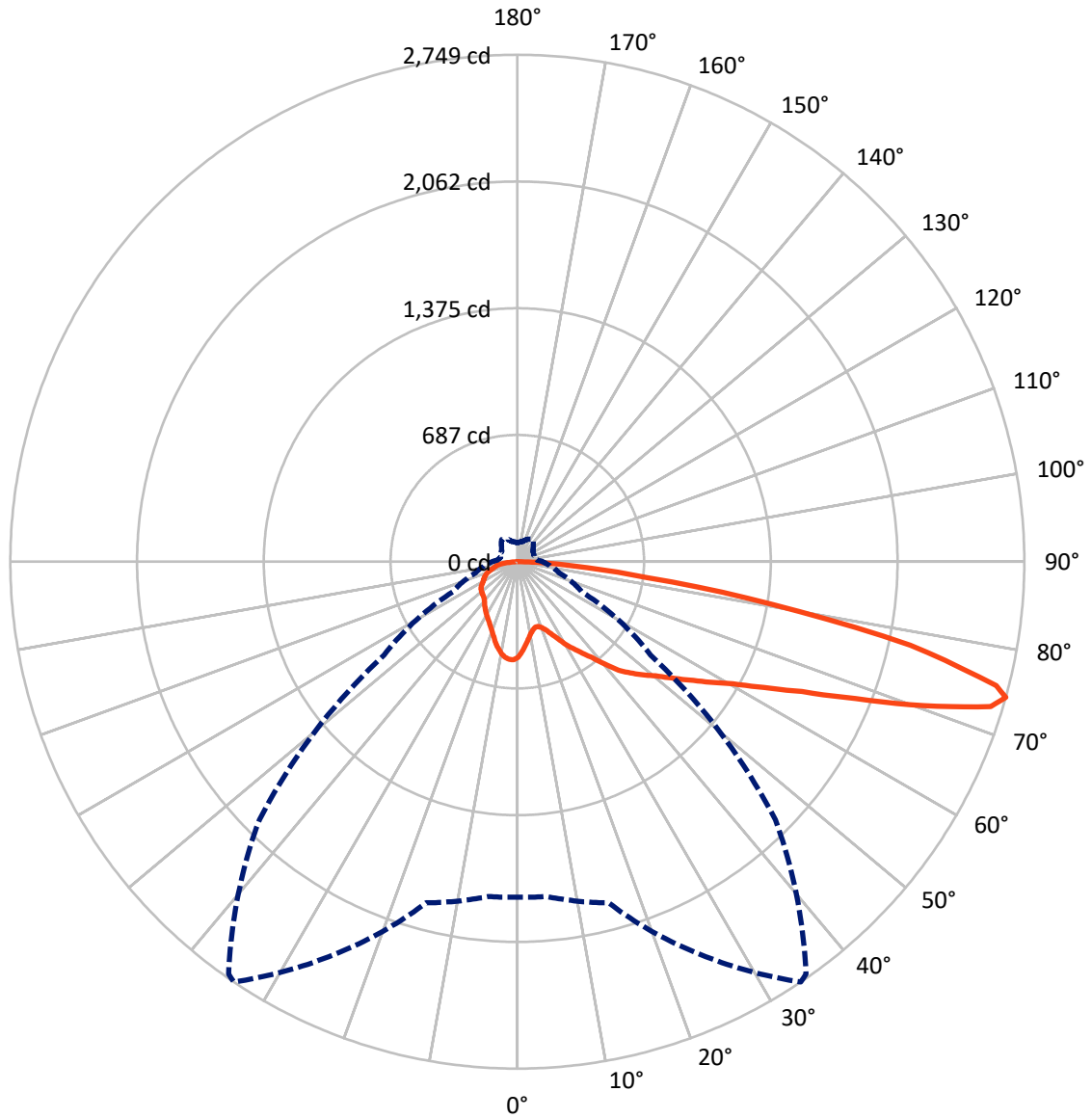
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	722.3	0.0	722.3
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	2671.7	0.0	2671.7
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	3394.0	0.0	3394.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.1	1.4
10°-20°	129.0	3.8
20°-30°	212.7	6.3
30°-40°	318.6	9.4
40°-50°	463.2	13.6
50°-60°	646.9	19.1
60°-70°	809.9	23.9
70°-80°	669.7	19.7
80°-90°	96.8	2.9
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°	3394.0	100.0
0°-180°	3394.0	100.0

**Coefficient of Utilization**



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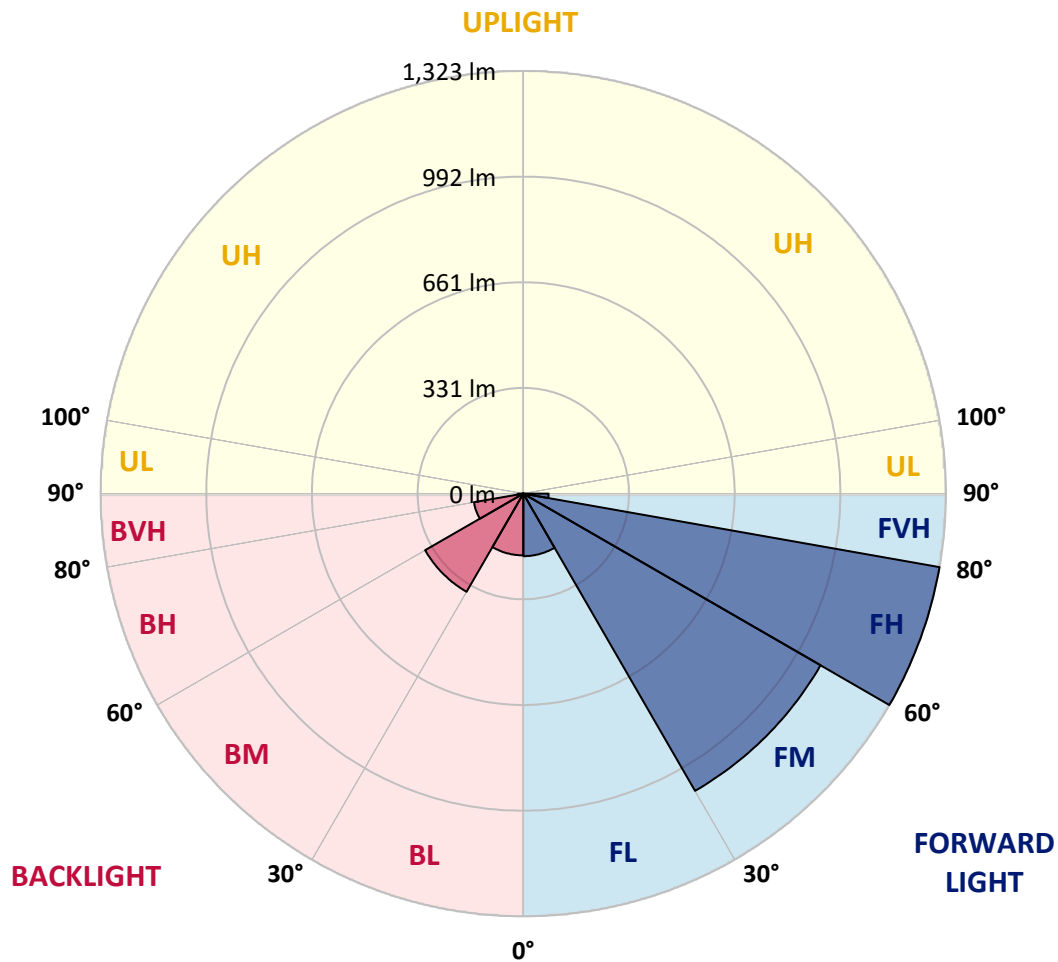
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	195.6	5.8			
FM (30°-60°)	1074.0	31.6			
FH (60°-80°)	1322.8	39.0			G1/1800
FVH (80°-90°)	79.3	2.3			G1/100
BL (0°-30°)	193.2	5.7	B1/500		
BM (30°-60°)	354.7	10.5	B1/1000		
BH (60°-80°)	156.9	4.6	B1/500		G1/500
BVH (80°-90°)	17.5	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2
2.5°	478.9	481.3	482.7	487.4	488.5	490.0	493.9	499.2	506.0	512.0	517.3
5°	439.0	442.8	445.1	449.2	457.3	458.0	468.6	480.6	494.3	507.1	517.6
7.5°	401.2	405.4	407.3	414.8	425.5	427.2	442.6	461.6	484.5	503.9	520.1
10°	372.9	374.9	379.1	384.7	397.5	398.6	418.7	444.1	473.8	502.4	524.2
12.5°	357.4	358.6	359.5	365.5	378.1	379.8	400.9	429.6	465.4	503.5	531.0
15°	359.7	360.1	355.9	357.1	367.2	369.7	390.5	420.0	460.1	506.4	541.1
17.5°	378.7	377.4	367.2	361.9	369.1	370.2	388.5	416.3	457.7	511.6	551.7
20°	408.6	406.7	389.2	377.6	381.7	382.6	395.2	419.1	460.1	520.3	568.0
22.5°	445.8	445.1	418.5	404.4	404.3	404.3	410.8	429.3	467.4	532.1	585.1
25°	497.9	493.9	459.3	441.1	436.0	435.7	434.9	446.0	476.8	544.7	605.4
27.5°	551.3	544.5	513.7	485.7	474.8	473.4	468.6	469.7	488.9	559.0	628.6
30°	599.2	594.9	566.0	534.9	522.0	518.9	505.4	499.2	509.0	584.8	665.4
32.5°	635.9	633.3	610.7	582.5	563.3	562.8	543.0	537.9	540.4	616.0	707.5
35°	665.6	666.5	655.1	630.6	608.6	605.4	592.3	585.9	578.7	661.1	760.6
37.5°	706.2	708.3	707.5	686.5	659.6	660.3	657.3	646.8	627.8	711.5	819.4
40°	751.0	752.5	752.3	744.2	730.1	730.9	729.7	717.7	689.3	775.6	884.8
42.5°	812.8	805.7	787.1	795.2	803.4	807.0	814.7	803.2	764.3	844.0	946.3
45°	882.0	868.5	826.4	830.1	860.8	867.5	910.0	894.2	845.7	922.6	1018.7
47.5°	925.6	912.3	876.8	876.0	916.6	923.2	998.4	992.6	919.8	1007.4	1107.1
50°	964.6	962.7	922.6	932.2	971.9	981.7	1094.7	1089.2	993.7	1107.5	1203.4
52.5°	1022.3	1007.1	975.1	994.8	1047.3	1060.1	1190.2	1174.2	1061.6	1195.8	1296.8
55°	1048.2	1044.7	1042.8	1059.9	1131.9	1141.1	1283.1	1246.4	1119.5	1270.7	1367.9
57.5°	1117.6	1111.0	1129.7	1141.3	1231.6	1245.7	1380.1	1321.8	1170.3	1330.1	1402.5
60°	1207.5	1203.9	1221.0	1242.1	1342.9	1364.3	1490.7	1386.1	1211.1	1360.0	1383.5
62.5°	1341.7	1341.4	1338.2	1383.3	1500.6	1520.4	1617.6	1448.7	1217.5	1337.6	1285.3
65°	1534.3	1527.5	1499.7	1548.9	1696.9	1720.1	1749.8	1483.7	1178.9	1222.7	1082.3
67.5°	1735.7	1735.3	1712.7	1776.6	1978.8	2002.7	1915.0	1476.0	1071.9	990.5	768.6
70°	1902.6	1894.5	1923.3	2093.7	2338.8	2366.5	2059.6	1385.2	853.8	654.1	456.7
72.5°	1942.7	1943.0	2002.8	2338.1	2684.6	2688.9	2111.7	1122.7	571.4	360.8	228.5
74°	1819.3	1822.5	1915.2	2350.3	2749.1	2729.6	1978.6	882.4	386.4	235.6	164.7
75°	1660.6	1640.5	1774.6	2268.9	2682.2	2661.1	1822.7	708.1	294.8	188.2	144.2
77.5°	887.9	908.3	1115.2	1693.2	2179.0	2154.8	1235.9	339.6	159.3	131.1	103.8
80°	316.1	348.6	490.0	886.0	1397.0	1404.5	589.8	155.7	112.1	96.6	73.3
82.5°	129.0	132.6	210.4	393.2	709.4	716.2	240.9	92.5	80.1	66.6	43.8
85°	50.4	51.9	93.1	176.7	302.7	322.5	83.3	48.9	49.3	38.2	22.4
87.5°	16.9	19.2	38.2	58.9	102.8	100.8	24.3	14.5	17.7	16.5	7.0
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°	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2	518.2
2.5°	519.9	523.5	525.9	528.5	531.0	531.7	531.2	532.9	533.1	533.2	533.4
5°	522.9	527.8	532.5	535.1	536.2	535.3	532.1	530.4	528.9	527.8	528.2
7.5°	527.0	534.0	538.3	539.4	536.4	532.1	524.2	518.0	514.1	511.4	511.2
10°	533.4	540.2	543.8	540.6	532.3	521.8	509.4	497.7	488.9	486.2	486.0
12.5°	541.5	549.2	549.0	539.6	525.2	506.4	486.2	472.7	460.7	454.6	457.1
15°	552.0	557.9	552.4	535.5	512.6	486.8	462.0	443.6	430.0	423.6	424.0
17.5°	564.3	569.3	554.9	528.2	494.9	461.8	433.0	415.5	404.8	400.1	399.7
20°	579.5	581.0	554.9	515.4	472.1	432.6	405.2	393.0	387.0	384.5	385.3
22.5°	595.9	592.8	551.9	497.3	442.2	402.2	383.8	378.3	375.3	374.9	375.3
25°	614.3	605.8	545.6	472.9	411.0	375.9	365.1	366.1	366.6	366.6	368.0
27.5°	636.8	619.9	535.3	442.0	374.5	351.4	348.4	355.0	358.0	358.6	359.5
30°	666.5	635.3	518.2	403.5	343.5	329.4	334.7	343.5	346.9	349.0	348.6
32.5°	701.9	652.3	495.1	365.0	318.5	314.0	320.4	329.4	333.2	334.3	332.8
35°	743.5	671.4	464.6	328.9	296.7	299.3	306.9	309.7	313.1	313.1	313.8
37.5°	788.2	686.9	427.4	295.8	279.8	289.4	294.8	292.2	290.7	288.8	289.7
40°	833.7	698.3	379.1	263.0	262.9	279.0	280.5	273.0	267.0	265.1	264.2
42.5°	873.4	705.5	335.4	237.7	246.9	268.9	270.0	258.0	248.4	242.7	240.9
45°	920.2	713.7	292.8	216.6	232.0	260.8	263.6	247.4	233.3	221.5	218.5
47.5°	984.3	732.5	259.1	200.2	221.3	255.7	259.7	238.8	220.2	204.8	202.3
50°	1056.7	758.3	233.0	189.2	213.0	251.2	256.1	230.0	208.0	190.8	189.0
52.5°	1123.1	772.2	210.4	179.2	204.9	242.9	251.4	223.6	195.9	176.9	175.2
55°	1159.4	749.7	188.2	169.4	193.9	232.2	244.8	214.7	184.3	169.6	167.2
57.5°	1164.3	703.0	168.1	158.9	182.2	219.0	232.6	204.0	176.7	164.5	162.5
60°	1126.5	633.5	152.5	150.2	170.4	204.2	218.9	194.6	169.0	158.9	156.8
62.5°	1032.4	557.9	141.6	142.3	158.3	188.6	208.7	185.6	161.7	152.7	150.8
65°	870.7	460.5	131.1	134.2	147.6	176.4	199.5	178.1	154.4	148.0	146.3
67.5°	604.9	332.4	122.4	125.8	137.4	164.0	188.8	170.0	146.1	142.7	140.1
70°	334.9	204.6	112.3	116.2	126.9	150.0	176.7	157.8	134.1	132.6	128.8
72.5°	176.0	130.3	100.8	105.1	112.6	132.2	158.3	144.4	122.2	115.8	110.9
74°	137.4	106.8	93.1	97.6	102.7	121.7	147.4	134.8	113.8	106.2	102.5
75°	119.8	95.1	86.5	92.3	96.8	114.5	139.0	128.0	109.1	101.9	98.5
77.5°	84.6	71.3	70.7	77.7	80.1	100.4	125.2	116.6	97.2	89.7	86.5
80°	59.4	53.4	56.0	60.4	63.7	88.7	116.2	100.8	79.7	70.9	69.8
82.5°	38.7	35.0	40.0	44.0	45.1	65.4	93.8	76.5	58.1	47.2	43.8
85°	17.9	17.5	22.9	22.4	22.2	32.0	55.7	44.7	33.5	25.0	23.5
87.5°	4.5	4.3	5.6	4.7	5.6	4.9	5.1	1.3	0.2	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)