

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: P302882

Luminaire Tested: **GLNA-AF-01-LED-E1-T4W-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-T4W-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3530.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

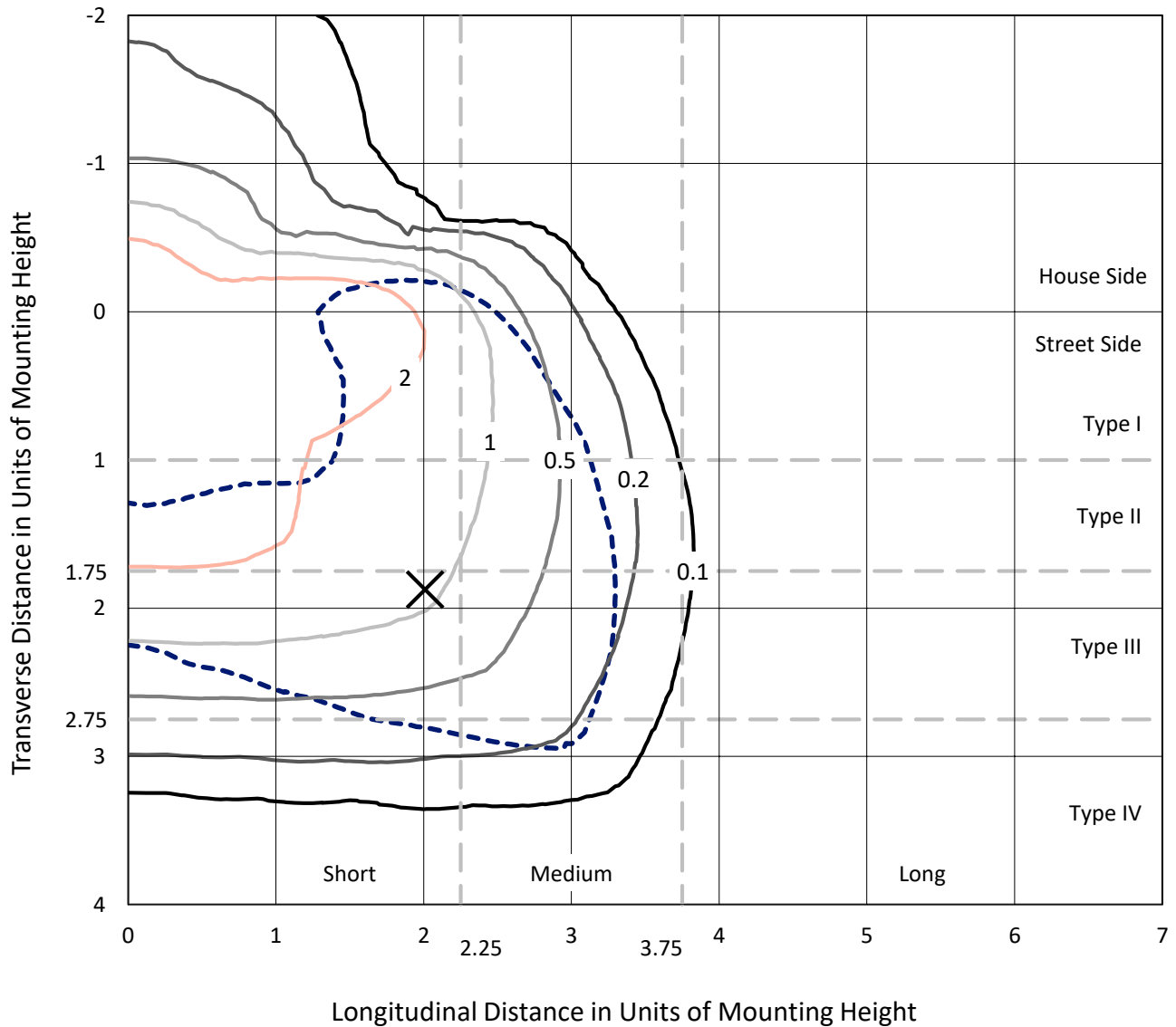
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

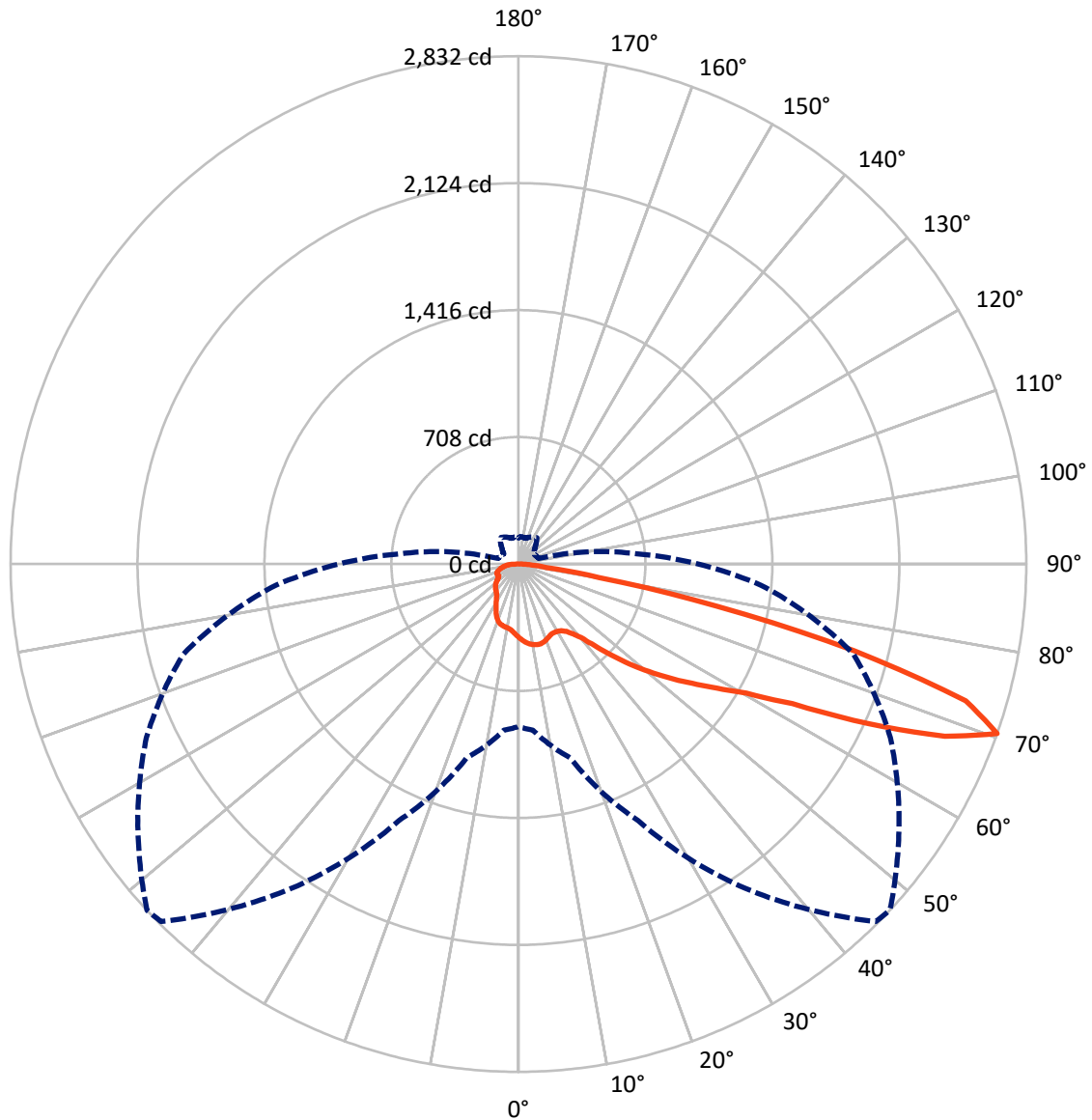
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	736.5	0.0	736.5
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	2793.7	0.0	2793.7
	% Fixture	79.1	0.0	79.1
Total	Lumens	3530.2	0.0	3530.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	1.1
10°-20°	115.1	3.3
20°-30°	170.0	4.8
30°-40°	247.1	7.0
40°-50°	444.8	12.6
50°-60°	770.5	21.8
60°-70°	1099.7	31.2
70°-80°	564.5	16.0
80°-90°	79.0	2.2
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°	3530.2	100.0
0°-180°	3530.2	100.0



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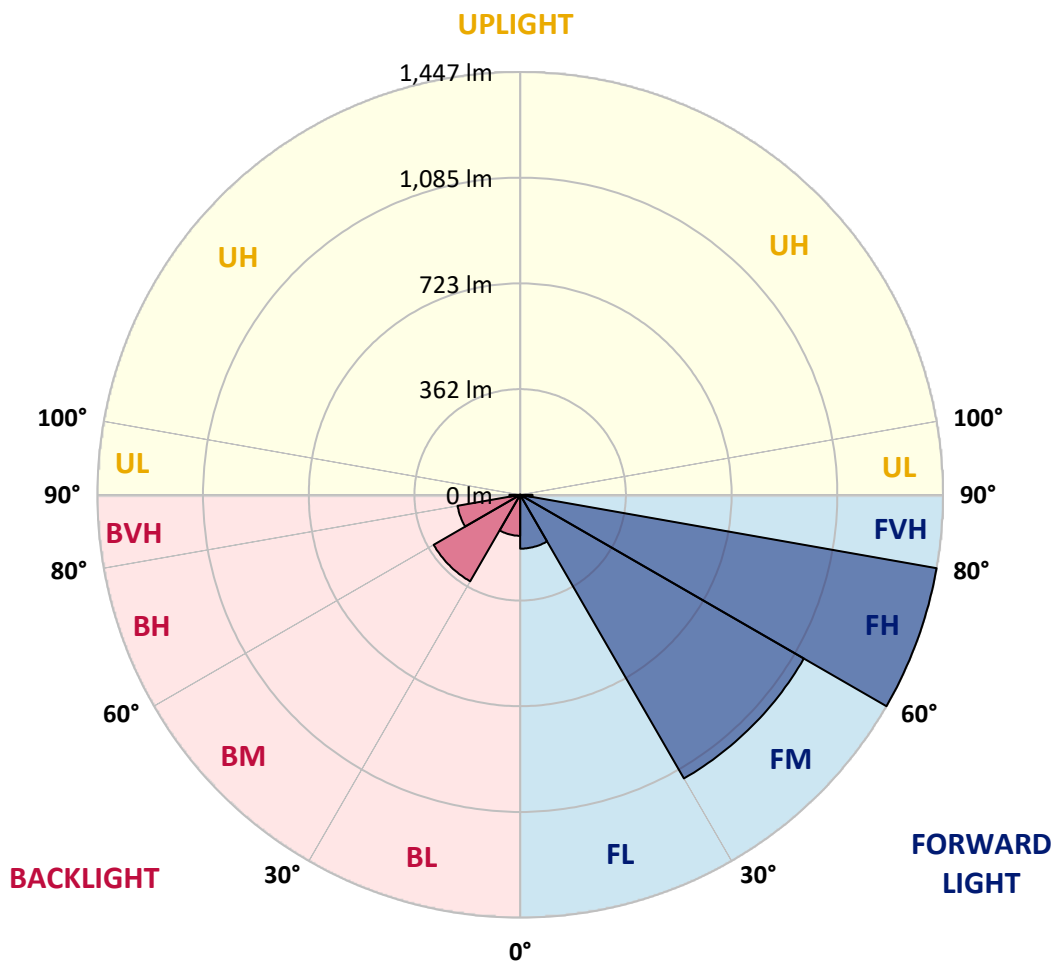
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	184.2	5.2			
FM (30°-60°)	1120.6	31.7			
FH (60°-80°)	1446.8	41.0			G1/1800
FVH (80°-90°)	42.2	1.2			G1/100
BL (0°-30°)	140.2	4.0	B1/500		
BM (30°-60°)	341.9	9.7	B1/1000		
BH (60°-80°)	217.5	6.2	B1/500		G1/500
BVH (80°-90°)	36.9	1.0			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°	35°	45°	47°	55°	65°	75°	85°
0°	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6
2.5°	433.7	432.8	432.5	431.8	430.9	426.6	425.7	422.7	418.4	413.9	409.3
5°	462.2	462.0	460.1	456.7	451.2	441.7	439.5	432.0	421.8	412.0	402.2
7.5°	487.2	485.7	482.1	475.2	465.6	452.7	449.6	439.2	425.2	411.8	398.6
10°	505.6	504.7	496.9	487.4	474.9	460.6	457.0	445.3	430.0	413.0	396.5
12.5°	516.1	514.4	505.3	494.0	479.0	465.1	461.5	449.6	432.5	413.0	393.6
15°	515.4	514.2	505.1	492.7	477.7	465.4	462.2	450.3	432.0	411.3	389.9
17.5°	501.7	502.2	494.5	482.3	469.9	460.6	457.7	446.7	428.5	407.9	385.4
20°	477.7	480.0	474.9	464.1	457.2	450.8	449.0	439.7	423.2	402.9	380.6
22.5°	453.6	455.8	453.8	444.6	443.6	439.8	438.8	432.1	418.6	399.8	377.7
25°	435.9	438.0	437.6	429.7	432.8	432.6	431.8	428.5	417.5	399.8	378.2
27.5°	431.1	431.8	431.1	423.9	428.1	431.6	430.9	430.4	420.6	404.8	384.7
30°	447.6	446.6	441.2	426.6	430.6	435.4	434.7	435.0	429.9	417.9	399.3
32.5°	513.4	508.7	491.9	450.8	440.3	442.9	443.3	449.0	449.8	438.0	422.0
35°	611.8	606.6	584.8	515.8	470.8	461.9	461.9	470.4	475.5	466.8	457.2
37.5°	716.0	710.3	698.7	605.8	534.6	494.7	493.8	499.8	507.1	509.3	511.6
40°	834.5	828.5	831.8	706.7	623.8	551.5	539.3	535.0	554.9	568.1	587.4
42.5°	964.2	961.4	962.6	819.2	725.3	636.5	619.2	597.0	621.1	644.6	684.9
45°	1084.2	1086.6	1085.4	939.6	838.3	740.2	721.8	678.9	702.4	742.8	808.6
47.5°	1189.3	1179.4	1194.8	1071.2	964.9	856.3	833.6	776.1	800.0	849.8	961.1
50°	1316.9	1315.6	1292.9	1246.7	1117.9	972.9	943.2	876.6	913.7	982.9	1153.3
52.5°	1451.1	1426.2	1405.4	1383.2	1280.2	1092.5	1056.0	976.7	1047.3	1134.4	1387.6
55°	1478.5	1467.4	1493.1	1530.4	1436.7	1216.7	1174.2	1102.2	1197.8	1307.5	1657.7
57.5°	1537.3	1537.1	1590.4	1656.8	1597.7	1348.4	1305.6	1253.9	1366.9	1505.9	1944.5
60°	1577.0	1588.1	1687.1	1816.0	1755.9	1500.5	1461.2	1428.9	1559.3	1727.6	2211.7
62.5°	1597.7	1612.9	1747.9	1880.6	1979.5	1753.9	1714.6	1668.0	1813.8	1970.8	2368.0
65°	1511.4	1541.0	1738.4	1936.4	2175.3	2164.5	2146.8	2065.1	2132.0	2163.0	2311.5
67.5°	1272.3	1302.7	1532.5	1884.4	2315.1	2560.6	2564.3	2424.7	2327.9	2179.4	1943.5
70°	906.5	930.3	1120.5	1579.9	2208.6	2819.4	2832.3	2590.4	2288.8	1932.8	1357.8
72.5°	430.4	445.0	625.0	1028.3	1752.7	2583.2	2608.2	2378.8	1946.2	1431.0	740.7
75°	158.2	162.6	211.2	437.4	1016.6	1905.0	1934.4	1705.3	1290.1	712.4	282.2
77.5°	94.8	97.7	118.5	184.6	399.8	1088.9	1132.3	927.4	563.8	265.2	138.8
80°	66.3	68.3	85.0	114.9	188.9	415.0	453.6	378.5	224.6	167.8	101.0
82.5°	44.8	45.9	59.8	77.6	125.5	148.2	159.9	168.3	151.5	124.9	64.1
85°	29.4	30.4	40.6	51.2	79.9	76.6	78.3	99.1	110.6	84.8	35.5
87.5°	16.8	17.5	24.4	27.3	39.2	32.5	32.8	52.2	70.8	57.2	21.6
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°	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6	409.6
2.5°	408.1	405.8	400.9	397.7	394.8	394.1	392.9	392.8	392.6	392.6	392.1
5°	398.9	395.2	387.5	383.1	379.5	379.2	379.0	379.9	380.2	380.6	380.1
7.5°	393.1	388.0	378.3	372.2	367.9	366.8	368.6	372.5	375.1	376.1	375.6
10°	389.5	383.1	372.0	365.3	361.7	361.2	363.4	368.1	373.4	375.4	375.3
12.5°	385.4	378.2	366.3	359.3	357.2	358.3	361.2	365.5	371.0	374.2	374.4
15°	381.3	372.9	360.7	354.5	353.6	355.0	357.8	361.0	365.3	368.6	368.9
17.5°	376.3	367.5	355.4	349.0	348.3	349.0	349.1	350.9	353.6	356.7	357.6
20°	371.0	362.0	349.3	343.0	339.9	337.2	334.0	334.4	335.2	338.4	339.0
22.5°	367.2	358.3	344.7	335.9	327.7	319.4	313.3	312.4	312.7	315.3	316.2
25°	367.5	358.1	343.5	328.4	310.4	297.1	288.9	287.5	287.3	289.2	290.4
27.5°	374.2	364.8	347.9	320.6	291.5	271.9	263.1	262.1	260.7	261.2	262.6
30°	389.2	380.4	358.8	312.7	271.0	247.2	238.0	237.0	235.1	234.3	235.3
32.5°	413.5	406.4	374.6	305.2	250.6	226.0	216.8	214.5	213.3	212.3	213.2
35°	454.1	451.0	395.7	296.9	232.6	209.7	201.3	197.9	196.2	198.0	199.4
37.5°	517.6	519.3	423.4	284.1	218.6	198.9	191.8	187.9	185.3	186.9	188.4
40°	607.6	608.8	453.9	265.9	206.6	192.5	185.0	181.4	177.7	175.0	174.8
42.5°	725.8	713.6	484.0	246.1	192.7	188.6	180.2	175.7	170.2	162.6	161.1
45°	865.9	823.2	506.8	223.4	177.1	183.8	174.8	168.7	160.1	151.8	151.0
47.5°	1027.4	940.8	518.0	199.9	162.4	176.7	168.3	158.5	147.7	143.6	143.1
50°	1224.5	1080.5	523.3	177.1	149.8	167.5	158.9	147.3	138.3	137.4	136.9
52.5°	1449.0	1248.4	525.1	158.3	139.3	155.4	151.2	140.0	132.7	133.5	133.5
55°	1684.0	1421.9	501.7	144.8	129.7	143.1	146.0	137.1	131.0	133.8	134.8
57.5°	1899.7	1575.6	428.1	134.3	120.6	133.6	144.1	139.8	135.7	146.8	147.5
60°	2065.2	1666.4	319.8	124.9	113.9	130.3	149.1	150.3	151.3	177.9	181.6
62.5°	2099.9	1636.2	219.8	117.5	110.8	133.1	158.2	158.3	157.1	175.7	177.9
65°	1940.7	1445.0	159.9	113.3	108.2	138.1	165.9	162.3	154.4	168.5	164.3
67.5°	1541.2	1088.7	133.1	110.3	104.4	137.8	174.1	165.9	152.9	165.1	158.3
70°	1000.4	658.3	118.5	107.7	99.9	131.2	178.9	165.6	148.4	153.6	145.6
72.5°	488.1	294.4	108.7	103.9	95.3	122.1	178.8	162.4	143.7	143.4	139.1
75°	191.0	134.8	99.8	98.2	87.4	111.8	174.0	158.0	138.3	132.7	131.2
77.5°	111.8	96.2	88.5	89.8	78.0	101.5	167.0	150.3	130.7	124.2	122.5
80°	81.4	72.0	75.4	77.6	66.6	91.2	157.5	140.8	122.3	125.5	123.1
82.5°	52.2	46.4	61.1	63.4	55.5	80.7	147.2	130.8	110.4	100.3	97.9
85°	26.6	29.4	45.5	48.3	42.8	66.3	134.7	117.7	97.0	83.4	84.8
87.5°	14.9	20.1	29.0	32.5	30.2	51.0	109.2	97.0	79.2	64.4	56.7
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)