

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: P299095

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5397.4 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

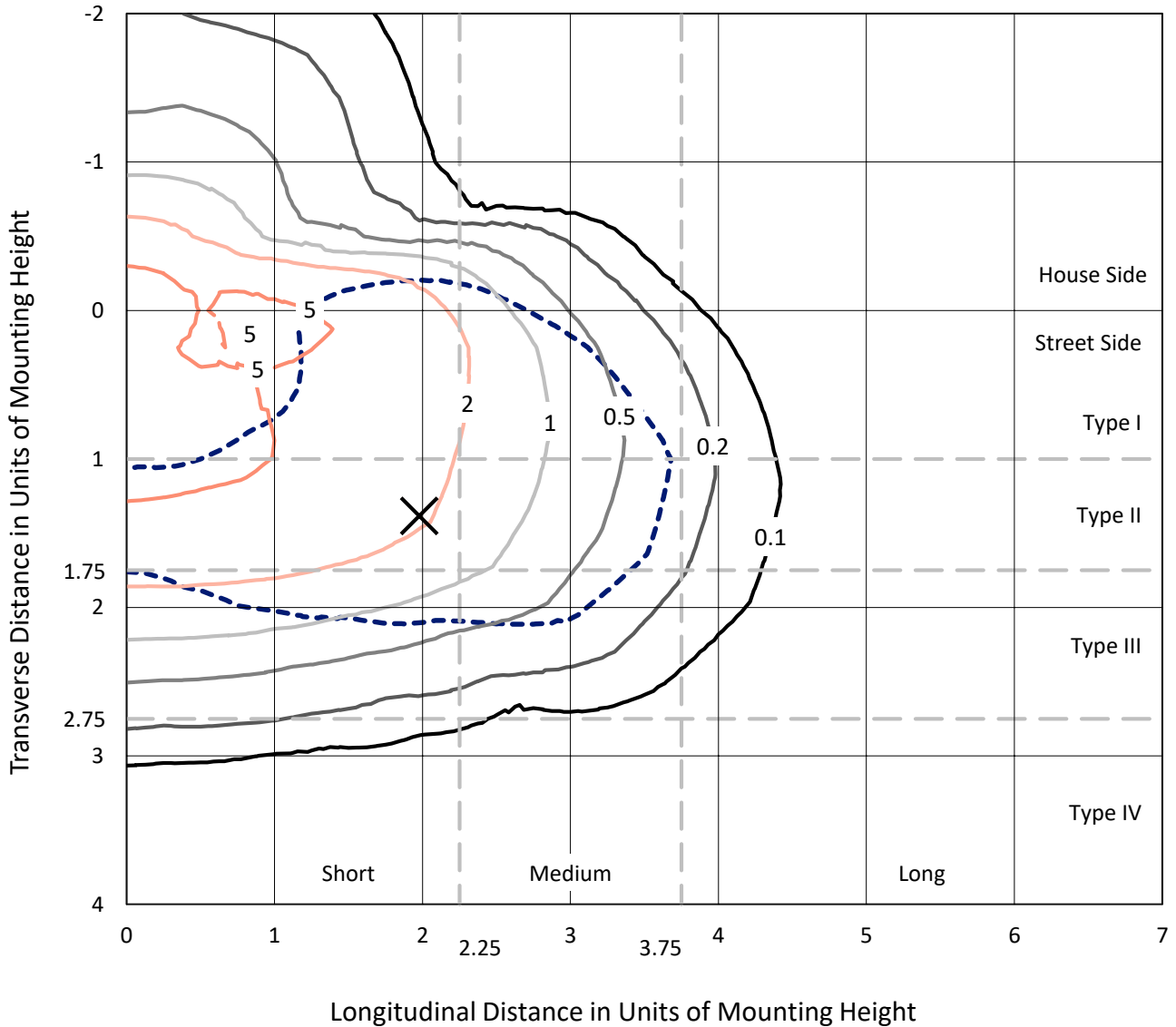
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

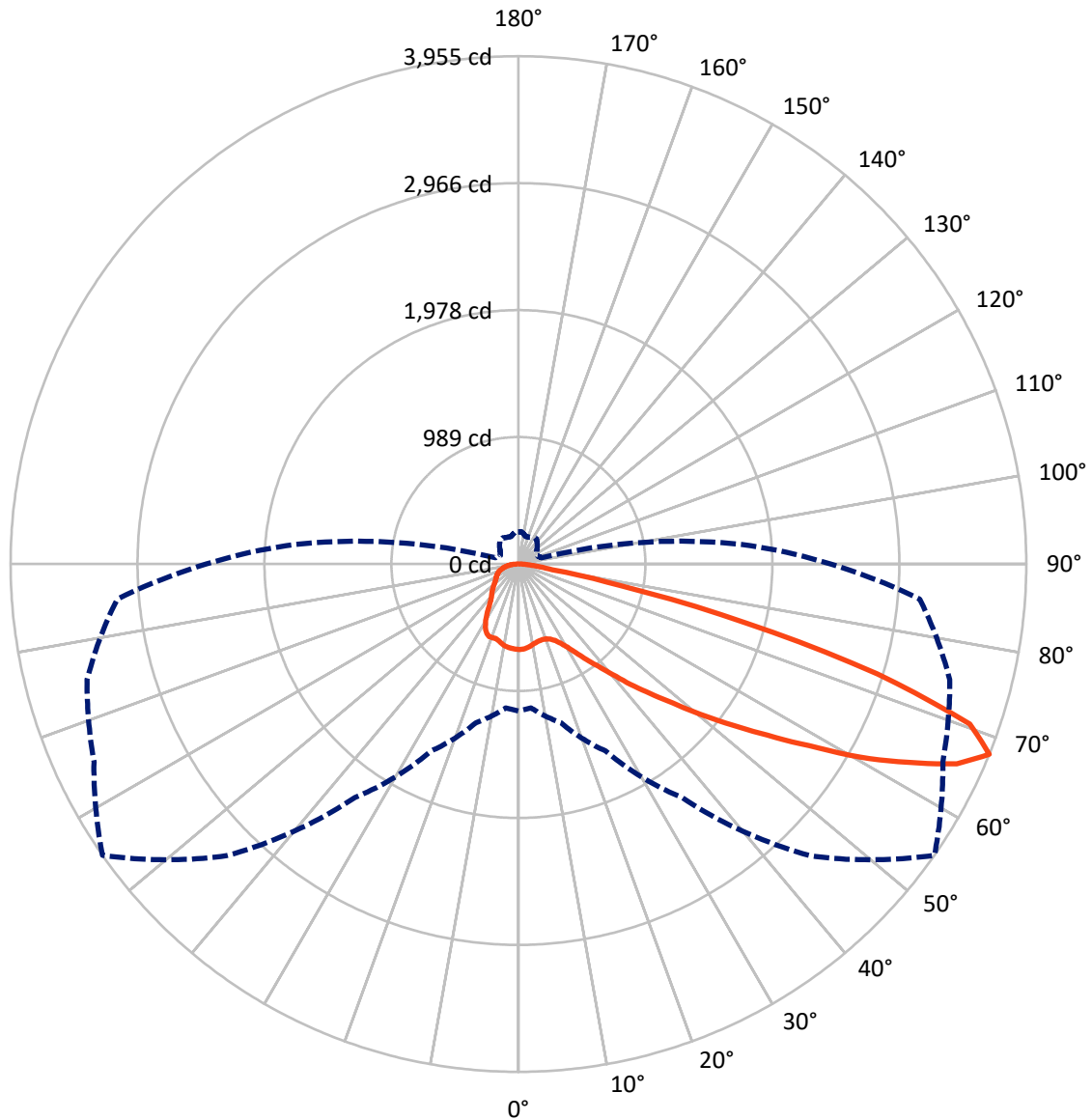
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1166.0	0.0	1166.0
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	4231.5	0.0	4231.5
	% Fixture	78.4	0.0	78.4
Total	Lumens	5397.4	0.0	5397.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	1.2
10°-20°	175.9	3.3
20°-30°	294.7	5.5
30°-40°	484.7	9.0
40°-50°	815.8	15.1
50°-60°	1284.0	23.8
60°-70°	1532.4	28.4
70°-80°	658.0	12.2
80°-90°	89.7	1.7
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°	5397.4	100.0
0°-180°	5397.4	100.0



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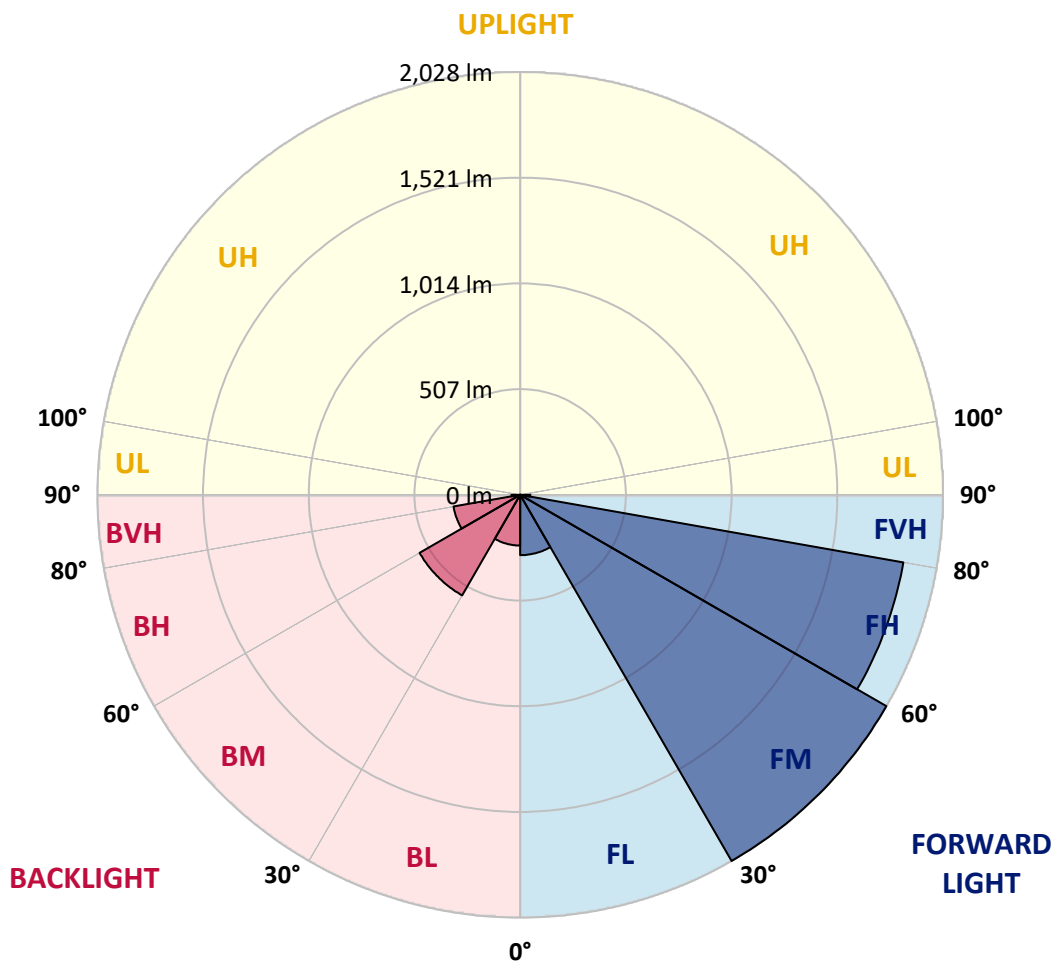
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	289.3	5.4			
FM	(30°-60°)	2027.7	37.6			
FH	(60°-80°)	1865.9	34.6			G2/5000
FVH	(80°-90°)	48.6	0.9			G1/100
BL	(0°-30°)	243.5	4.5	B1/500		
BM	(30°-60°)	556.9	10.3	B1/1000		
BH	(60°-80°)	324.5	6.0	B1/500		G1/500
BVH	(80°-90°)	41.2	0.8			G1/100
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°	45°	55°	65°	75°	85°	90°
0°	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6
2.5°	659.8	660.1	660.6	662.7	664.5	664.0	664.3	663.2	663.0	661.4	663.0
5°	651.5	652.3	652.5	655.9	658.0	658.5	657.7	656.4	654.9	653.3	654.1
7.5°	632.5	634.5	634.8	639.5	642.9	647.3	647.6	647.8	647.0	646.0	647.6
10°	620.5	621.0	620.7	624.1	626.7	631.7	634.5	639.5	641.6	642.1	643.1
12.5°	619.7	619.2	618.4	618.4	617.6	619.7	624.9	631.9	636.9	638.4	639.7
15°	628.0	627.8	625.2	621.2	616.3	614.7	619.2	627.0	633.5	636.9	638.2
17.5°	646.8	645.2	641.1	632.2	621.5	617.3	617.9	624.4	631.9	636.4	637.7
20°	681.2	681.2	672.3	655.7	636.6	626.7	622.0	625.9	633.2	639.2	641.1
22.5°	740.6	741.2	726.3	698.9	666.9	645.7	634.0	633.2	641.8	648.6	650.7
25°	824.8	822.8	801.9	762.8	714.0	679.1	658.8	654.1	661.4	668.9	671.6
27.5°	922.9	915.3	890.5	843.4	780.3	729.2	697.9	690.3	697.4	706.0	708.6
30°	1019.8	1012.0	982.6	930.9	860.8	796.2	751.3	739.1	749.0	761.2	762.8
32.5°	1116.8	1116.8	1084.0	1023.8	947.4	876.2	822.5	807.9	824.3	839.2	842.6
35°	1232.8	1233.4	1201.6	1129.1	1047.0	971.6	912.4	901.7	926.5	936.9	945.0
37.5°	1375.4	1378.3	1337.4	1249.8	1159.8	1080.6	1010.2	995.6	1020.4	1048.8	1074.9
40°	1529.5	1533.2	1488.1	1380.1	1290.2	1207.3	1131.2	1104.8	1146.0	1200.2	1233.9
42.5°	1676.5	1695.3	1651.8	1540.7	1444.0	1358.2	1281.1	1242.7	1294.4	1376.2	1405.4
45°	1889.0	1902.6	1826.7	1726.1	1635.1	1539.2	1437.0	1396.6	1468.8	1572.0	1578.0
47.5°	2030.6	2020.4	1981.8	1919.2	1861.6	1772.0	1618.1	1573.8	1669.8	1791.2	1757.6
50°	2105.9	2109.0	2103.8	2107.5	2109.6	2053.2	1840.3	1779.5	1894.0	2040.7	1963.3
52.5°	2176.3	2155.4	2172.6	2258.2	2361.4	2340.5	2081.9	2018.6	2134.3	2317.6	2180.7
55°	2174.7	2142.9	2199.0	2349.9	2573.9	2597.8	2353.3	2280.3	2388.5	2614.5	2411.2
57.5°	2097.8	2099.4	2185.7	2383.3	2721.9	2839.8	2668.2	2558.7	2658.1	2915.4	2621.6
60°	1992.0	2006.3	2130.7	2377.8	2840.6	3038.2	3054.6	2858.8	2922.1	3188.8	2795.7
62.5°	1821.2	1836.3	2007.9	2321.0	2822.6	3229.2	3403.9	3199.3	3198.2	3354.6	2846.8
65°	1551.9	1547.5	1727.6	2108.5	2671.6	3370.5	3750.9	3493.6	3406.3	3357.3	2744.1
67.5°	1144.5	1124.6	1279.2	1605.9	2220.6	3212.3	3955.0	3646.9	3477.2	3136.4	2430.2
70°	593.9	574.1	699.2	937.7	1460.4	2507.1	3729.0	3567.6	3320.5	2629.1	1903.9
72.5°	253.9	250.5	301.4	411.4	706.5	1446.1	2924.0	3088.0	2849.2	1958.9	1309.0
75°	170.8	169.7	188.7	224.2	317.8	586.8	1829.8	2191.9	2084.5	1214.6	736.2
77.5°	134.0	132.7	143.9	161.1	206.0	231.5	812.1	1176.8	1089.2	528.7	322.2
80°	104.8	103.8	110.8	120.2	148.1	146.0	267.2	468.2	362.4	202.6	156.7
82.5°	82.6	82.6	88.4	88.6	105.1	99.6	139.5	206.2	180.9	118.1	95.9
85°	75.6	75.6	81.6	66.2	68.6	62.8	86.6	122.3	114.7	48.5	41.7
87.5°	38.1	37.0	68.6	58.7	37.3	33.4	42.2	59.2	63.6	26.9	20.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6	665.6
2.5°	662.4	662.2	662.7	663.0	665.0	667.9	669.2	671.0	672.1	671.6
5°	654.6	655.1	657.2	658.8	662.4	667.1	669.7	671.8	673.6	672.9
7.5°	648.1	649.4	652.5	653.8	655.9	657.2	657.0	657.7	659.3	657.5
10°	644.4	646.0	648.4	646.5	641.6	634.5	628.0	624.6	625.7	624.4
12.5°	640.8	642.9	641.1	632.5	618.6	609.5	604.6	605.1	607.4	607.9
15°	638.7	639.5	631.7	615.5	601.4	600.1	602.7	602.2	602.5	602.5
17.5°	638.7	636.6	622.0	605.9	599.9	597.5	589.4	579.3	574.8	573.3
20°	642.1	636.6	618.9	608.2	595.2	575.1	553.7	534.9	526.6	524.3
22.5°	652.3	642.9	627.8	609.2	572.2	538.6	504.7	482.3	467.2	464.6
25°	672.9	662.4	645.2	595.4	535.7	487.8	449.2	424.2	409.0	406.9
27.5°	708.8	702.1	654.6	564.9	487.2	435.9	400.2	380.9	369.7	368.9
30°	763.1	759.7	649.9	519.8	427.5	385.6	368.4	357.2	348.8	348.6
32.5°	849.6	822.2	634.5	464.8	373.1	349.9	342.8	336.0	329.5	329.5
35°	960.9	872.8	605.3	405.9	339.9	330.0	321.2	310.5	301.9	301.4
37.5°	1091.8	904.1	552.9	358.5	324.3	316.7	303.7	287.8	272.7	270.1
40°	1224.0	913.5	479.2	329.3	314.4	303.5	287.5	268.8	254.2	253.4
42.5°	1345.2	895.5	401.0	309.2	304.5	289.9	273.2	256.5	245.1	244.8
45°	1446.9	848.8	335.3	290.2	294.1	277.6	262.8	249.2	240.4	238.5
47.5°	1542.5	782.9	289.1	270.1	283.6	270.9	258.4	245.6	237.0	235.7
50°	1653.6	711.7	256.8	250.5	274.5	268.5	262.0	248.7	234.4	232.8
52.5°	1788.1	650.2	231.5	233.3	267.5	271.6	271.4	257.6	232.5	230.5
55°	1938.3	581.9	212.5	219.2	264.6	277.4	273.7	265.9	234.1	231.0
57.5°	2086.1	502.1	199.2	208.6	260.4	276.9	262.5	251.3	237.8	233.3
60°	2196.9	395.0	189.0	199.2	251.3	268.3	250.3	235.4	237.0	233.6
62.5°	2204.2	305.3	176.8	191.1	237.5	259.7	242.2	228.4	240.4	237.2
65°	2074.6	230.7	165.0	181.4	222.6	254.2	234.4	224.5	247.4	244.0
67.5°	1746.7	185.6	155.1	171.5	207.8	242.7	227.3	220.8	253.7	247.7
70°	1261.0	158.2	145.5	159.5	194.5	229.7	221.1	214.3	236.7	227.3
72.5°	776.4	137.1	134.5	143.6	184.3	216.1	211.7	202.0	213.2	205.7
75°	387.7	118.9	122.3	128.0	170.0	200.7	196.0	186.4	188.0	186.4
77.5°	185.6	101.7	107.9	112.4	151.5	183.3	178.3	168.4	166.6	166.8
80°	117.6	85.0	91.0	94.1	135.3	162.9	158.0	148.1	168.9	156.7
82.5°	73.5	69.1	70.6	76.4	117.8	141.8	135.3	126.4	152.2	120.4
85°	40.7	48.2	50.3	55.3	90.7	118.6	112.1	100.9	90.5	88.9
87.5°	24.2	28.7	29.5	33.1	61.0	85.8	75.9	72.0	59.7	59.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)