

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: P299158

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299158
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-T3-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5018.7 lumens
Efficiency: N/A
Efficacy: 114.1 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 - G1

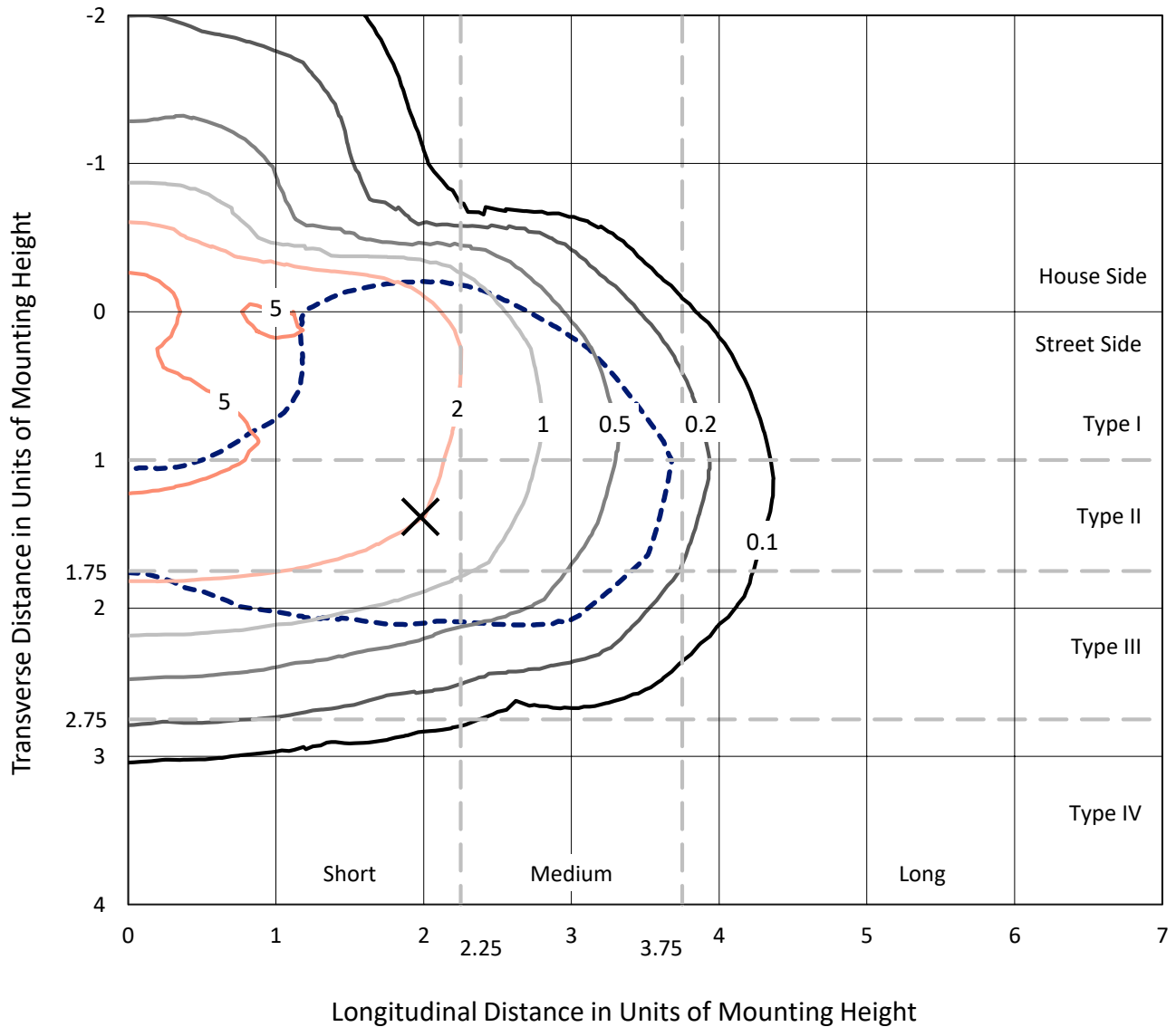
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

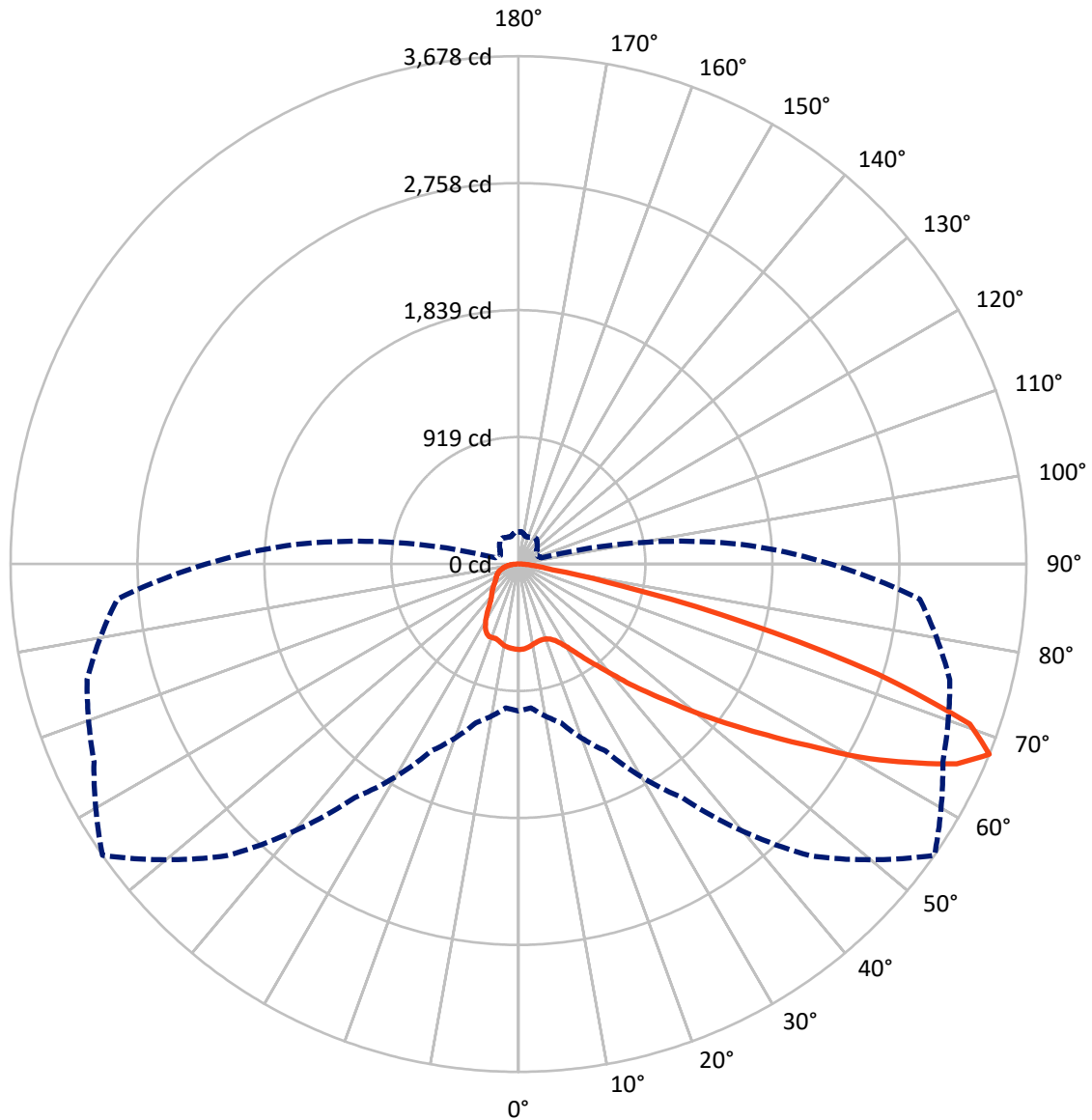
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 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	1084.2	0.0	1084.2
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	3934.6	0.0	3934.6
	% Fixture	78.4	0.0	78.4
Total	Lumens	5018.7	0.0	5018.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	1.2
10°-20°	163.6	3.3
20°-30°	274.0	5.5
30°-40°	450.6	9.0
40°-50°	758.6	15.1
50°-60°	1194.0	23.8
60°-70°	1424.8	28.4
70°-80°	611.9	12.2
80°-90°	83.4	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°	5018.7	100.0
0°-180°	5018.7	100.0



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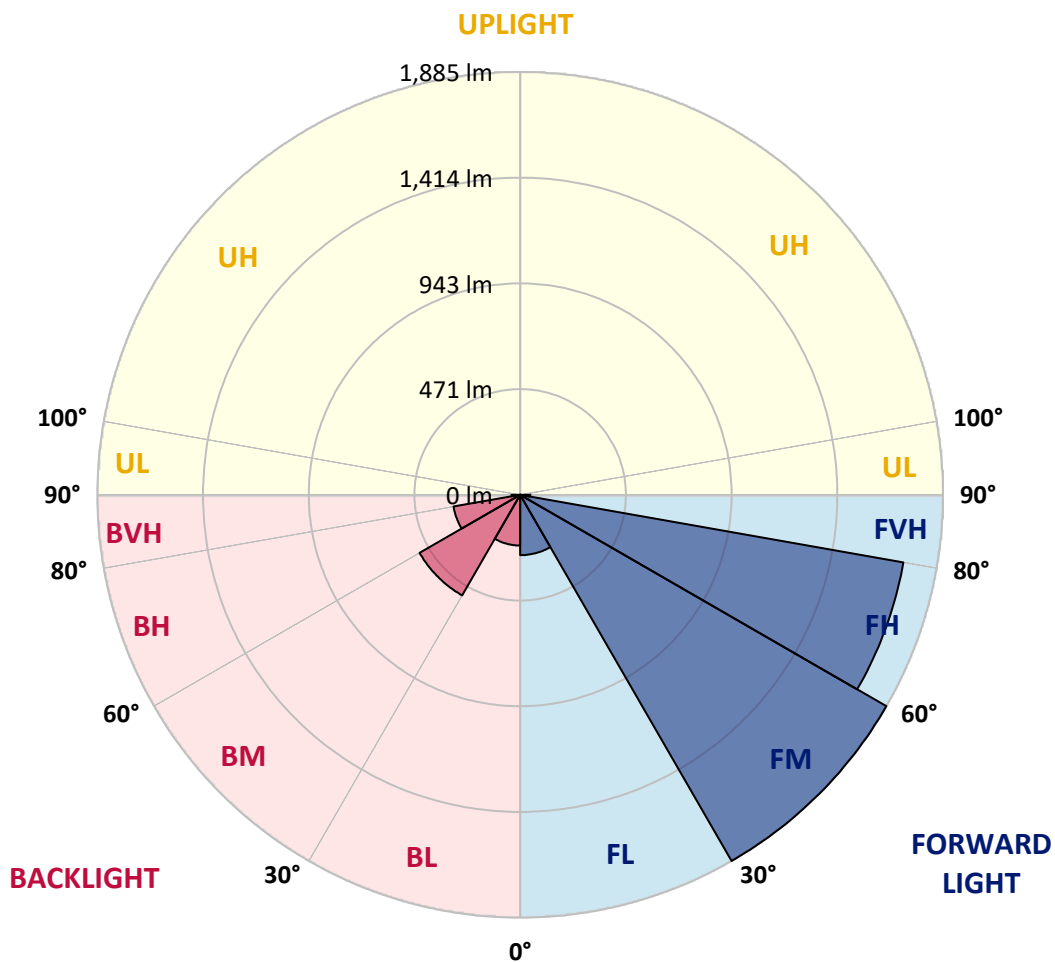
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.0	5.4			
FM	(30°-60°)	1885.4	37.6			
FH	(60°-80°)	1735.0	34.6			G1/1800
FVH	(80°-90°)	45.2	0.9			G1/100
BL	(0°-30°)	226.4	4.5	B1/500		
BM	(30°-60°)	517.8	10.3	B1/1000		
BH	(60°-80°)	301.7	6.0	B1/500		G1/500
BVH	(80°-90°)	38.3	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9
2.5°	613.5	613.8	614.3	616.2	617.9	617.4	617.7	616.7	616.4	615.0	616.4
5°	605.8	606.5	606.7	609.9	611.8	612.3	611.6	610.4	608.9	607.5	608.2
7.5°	588.1	590.0	590.3	594.6	597.8	601.9	602.1	602.4	601.7	600.7	602.1
10°	576.9	577.4	577.2	580.3	582.7	587.4	590.0	594.6	596.6	597.0	598.0
12.5°	576.2	575.7	575.0	575.0	574.3	576.2	581.0	587.6	592.2	593.7	594.9
15°	584.0	583.7	581.3	577.7	573.0	571.6	575.7	583.0	589.0	592.2	593.4
17.5°	601.4	600.0	596.1	587.8	577.9	574.0	574.5	580.6	587.6	591.7	592.9
20°	633.4	633.4	625.2	609.7	592.0	582.7	578.4	582.0	588.8	594.4	596.1
22.5°	688.7	689.2	675.3	649.9	620.1	600.4	589.5	588.8	596.8	603.1	605.0
25°	767.0	765.0	745.6	709.3	664.0	631.5	612.6	608.2	615.0	622.0	624.4
27.5°	858.1	851.1	828.1	784.2	725.5	678.0	648.9	641.9	648.4	656.4	658.9
30°	948.3	941.0	913.6	865.6	800.4	740.3	698.6	687.2	696.4	707.8	709.3
32.5°	1038.5	1038.5	1007.9	951.9	880.9	814.7	764.8	751.2	766.5	780.3	783.5
35°	1146.3	1146.8	1117.2	1049.9	973.5	903.4	848.4	838.5	861.5	871.2	878.7
37.5°	1278.9	1281.6	1243.5	1162.1	1078.5	1004.8	939.3	925.7	948.8	975.2	999.4
40°	1422.2	1425.6	1383.7	1283.3	1199.7	1122.6	1051.8	1027.3	1065.6	1116.0	1147.3
42.5°	1558.9	1576.4	1535.9	1432.6	1342.7	1262.9	1191.2	1155.6	1203.5	1279.7	1306.8
45°	1756.5	1769.1	1698.5	1605.0	1520.4	1431.2	1336.1	1298.6	1365.7	1461.7	1467.3
47.5°	1888.1	1878.6	1842.8	1784.6	1731.0	1647.6	1504.6	1463.4	1552.6	1665.6	1634.3
50°	1958.2	1961.1	1956.2	1959.6	1961.6	1909.2	1711.1	1654.7	1761.1	1897.6	1825.6
52.5°	2023.6	2004.2	2020.2	2099.7	2195.7	2176.3	1935.9	1877.0	1984.6	2155.0	2027.7
55°	2022.2	1992.6	2044.7	2185.0	2393.3	2415.6	2188.2	2120.3	2220.9	2431.1	2242.0
57.5°	1950.6	1952.1	2032.3	2216.1	2531.0	2640.5	2481.0	2379.2	2471.6	2710.8	2437.6
60°	1852.2	1865.6	1981.2	2211.0	2641.3	2825.0	2840.3	2658.2	2717.1	2965.1	2599.6
62.5°	1693.4	1707.5	1867.0	2158.1	2624.5	3002.7	3165.1	2974.8	2973.8	3119.3	2647.1
65°	1443.0	1438.9	1606.4	1960.6	2484.2	3134.1	3487.7	3248.5	3167.3	3121.7	2551.6
67.5°	1064.2	1045.7	1189.5	1493.2	2064.8	2986.9	3677.5	3391.0	3233.2	2916.4	2259.7
70°	552.2	533.8	650.1	871.9	1358.0	2331.2	3467.4	3317.3	3087.5	2444.7	1770.3
72.5°	236.1	233.0	280.2	382.5	656.9	1344.6	2718.8	2871.3	2649.3	1821.4	1217.1
75°	158.8	157.8	175.5	208.5	295.5	545.7	1701.4	2038.2	1938.3	1129.4	684.6
77.5°	124.6	123.4	133.8	149.8	191.5	215.3	755.1	1094.2	1012.8	491.6	299.6
80°	97.4	96.5	103.0	111.7	137.7	135.7	248.5	435.4	336.9	188.3	145.7
82.5°	76.8	76.8	82.2	82.4	97.7	92.6	129.7	191.7	168.2	109.8	89.2
85°	70.3	70.3	75.9	61.6	63.8	58.4	80.5	113.7	106.7	45.1	38.8
87.5°	35.4	34.4	63.8	54.5	34.7	31.0	39.3	55.0	59.1	25.0	19.4
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°	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9	618.9
2.5°	616.0	615.7	616.2	616.4	618.4	621.0	622.3	624.0	624.9	624.4
5°	608.7	609.2	611.1	612.6	616.0	620.3	622.7	624.7	626.4	625.7
7.5°	602.6	603.8	606.7	608.0	609.9	611.1	610.9	611.6	613.0	611.3
10°	599.2	600.7	602.9	601.2	596.6	590.0	584.0	580.8	581.8	580.6
12.5°	595.8	597.8	596.1	588.1	575.2	566.7	562.1	562.6	564.8	565.3
15°	593.9	594.6	587.4	572.3	559.2	558.0	560.4	560.0	560.2	560.2
17.5°	593.9	592.0	578.4	563.4	557.8	555.6	548.1	538.6	534.5	533.1
20°	597.0	592.0	575.5	565.5	553.4	534.7	514.9	497.4	489.7	487.5
22.5°	606.5	597.8	583.7	566.5	532.1	500.8	469.3	448.5	434.4	432.0
25°	625.7	616.0	600.0	553.7	498.1	453.5	417.7	394.4	380.3	378.4
27.5°	659.1	652.8	608.7	525.3	453.1	405.3	372.1	354.2	343.7	343.0
30°	709.5	706.4	604.3	483.4	397.5	358.5	342.5	332.1	324.3	324.1
32.5°	790.0	764.5	590.0	432.2	346.9	325.3	318.8	312.5	306.4	306.4
35°	893.5	811.6	562.9	377.4	316.1	306.9	298.6	288.7	280.7	280.2
37.5°	1015.2	840.7	514.1	333.3	301.6	294.5	282.4	267.6	253.6	251.1
40°	1138.1	849.4	445.5	306.2	292.3	282.2	267.4	249.9	236.3	235.6
42.5°	1250.8	832.7	372.8	287.5	283.1	269.6	254.0	238.5	227.9	227.6
45°	1345.4	789.3	311.7	269.8	273.4	258.2	244.3	231.7	223.5	221.8
47.5°	1434.3	727.9	268.8	251.1	263.7	251.9	240.2	228.3	220.3	219.1
50°	1537.6	661.8	238.8	233.0	255.3	249.7	243.6	231.3	217.9	216.5
52.5°	1662.7	604.6	215.3	217.0	248.7	252.6	252.3	239.5	216.2	214.3
55°	1802.3	541.1	197.6	203.9	246.0	257.9	254.5	247.3	217.7	214.8
57.5°	1939.7	466.9	185.2	193.9	242.2	257.4	244.1	233.7	221.1	217.0
60°	2042.8	367.2	175.7	185.2	233.7	249.4	232.7	218.9	220.3	217.2
62.5°	2049.5	283.9	164.4	177.7	220.8	241.4	225.2	212.3	223.5	220.6
65°	1929.1	214.5	153.4	168.7	207.0	236.3	217.9	208.7	230.0	226.9
67.5°	1624.1	172.6	144.2	159.5	193.2	225.7	211.4	205.3	235.9	230.3
70°	1172.5	147.1	135.3	148.4	180.8	213.6	205.6	199.3	220.1	211.4
72.5°	721.9	127.5	125.1	133.6	171.4	201.0	196.8	187.9	198.3	191.3
75°	360.5	110.5	113.7	119.0	158.0	186.7	182.3	173.3	174.8	173.3
77.5°	172.6	94.5	100.4	104.5	140.8	170.4	165.8	156.6	154.9	155.1
80°	109.3	79.0	84.6	87.5	125.8	151.5	146.9	137.7	157.1	145.7
82.5°	68.4	64.2	65.7	71.0	109.6	131.9	125.8	117.6	141.6	112.0
85°	37.8	44.8	46.8	51.4	84.4	110.3	104.2	93.8	84.1	82.7
87.5°	22.5	26.7	27.4	30.8	56.7	79.8	70.5	66.9	55.5	55.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)