

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: P300296

Luminaire Tested: **GLNA-AF-01-LED-E1-T4FT-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
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-T4FT-7027
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5429 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

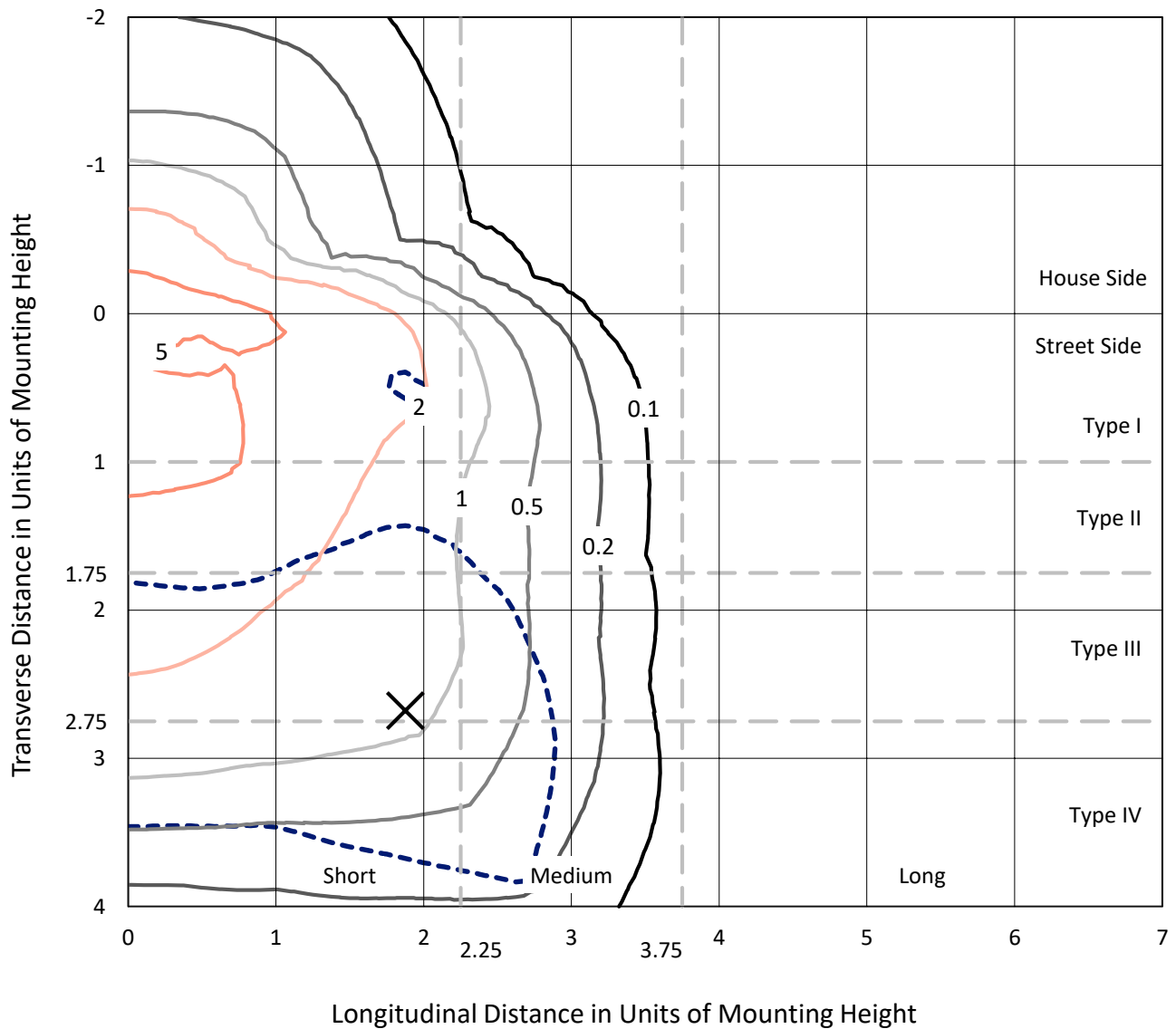
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

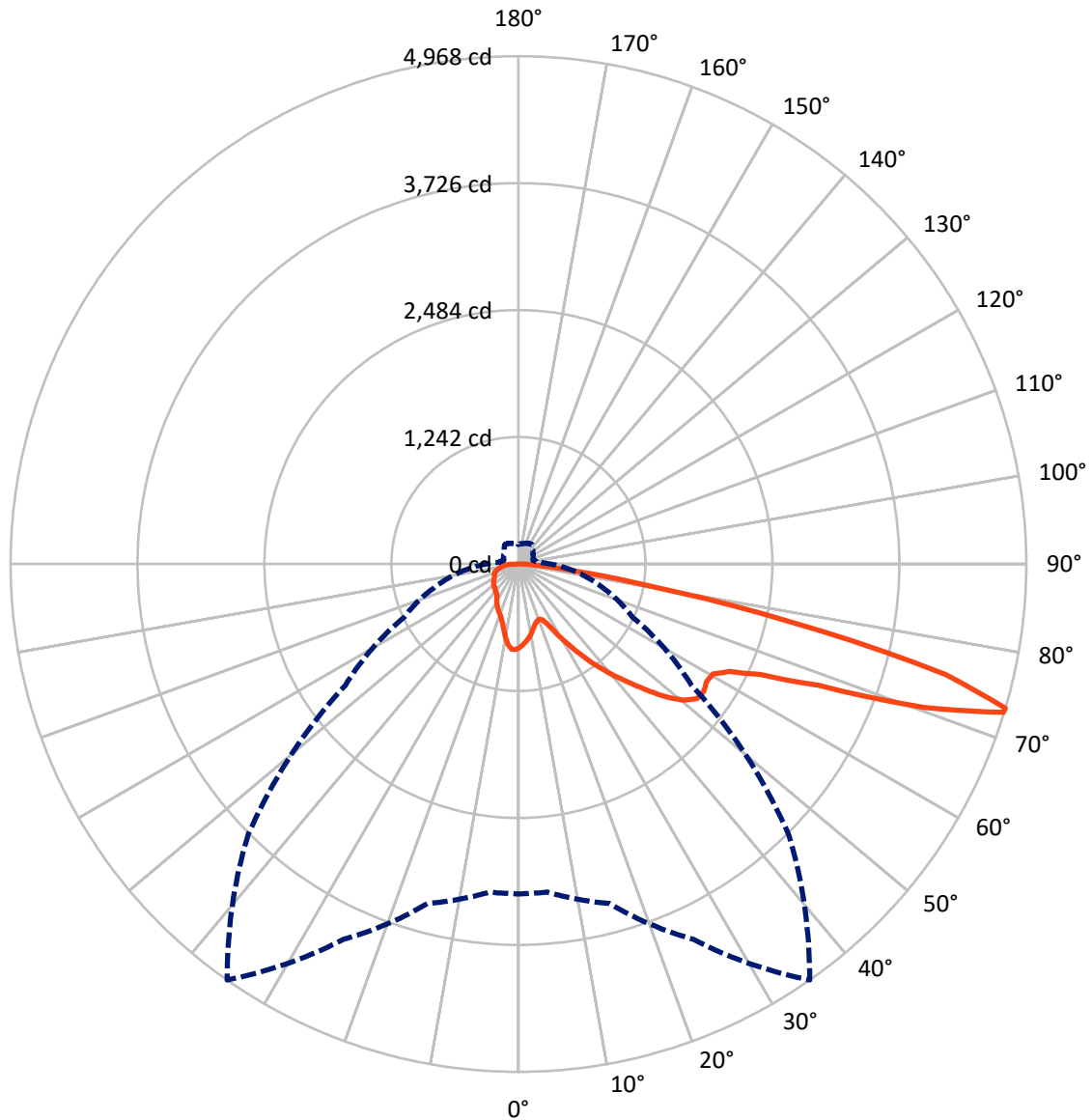
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1035.5	0.0	1035.5
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	4393.6	0.0	4393.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	5429.0	0.0	5429.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	1.4
10°-20°	185.1	3.4
20°-30°	299.3	5.5
30°-40°	501.9	9.2
40°-50°	773.7	14.3
50°-60°	1037.9	19.1
60°-70°	1382.7	25.5
70°-80°	1054.6	19.4
80°-90°	119.5	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°	5429.0	100.0
0°-180°	5429.0	100.0



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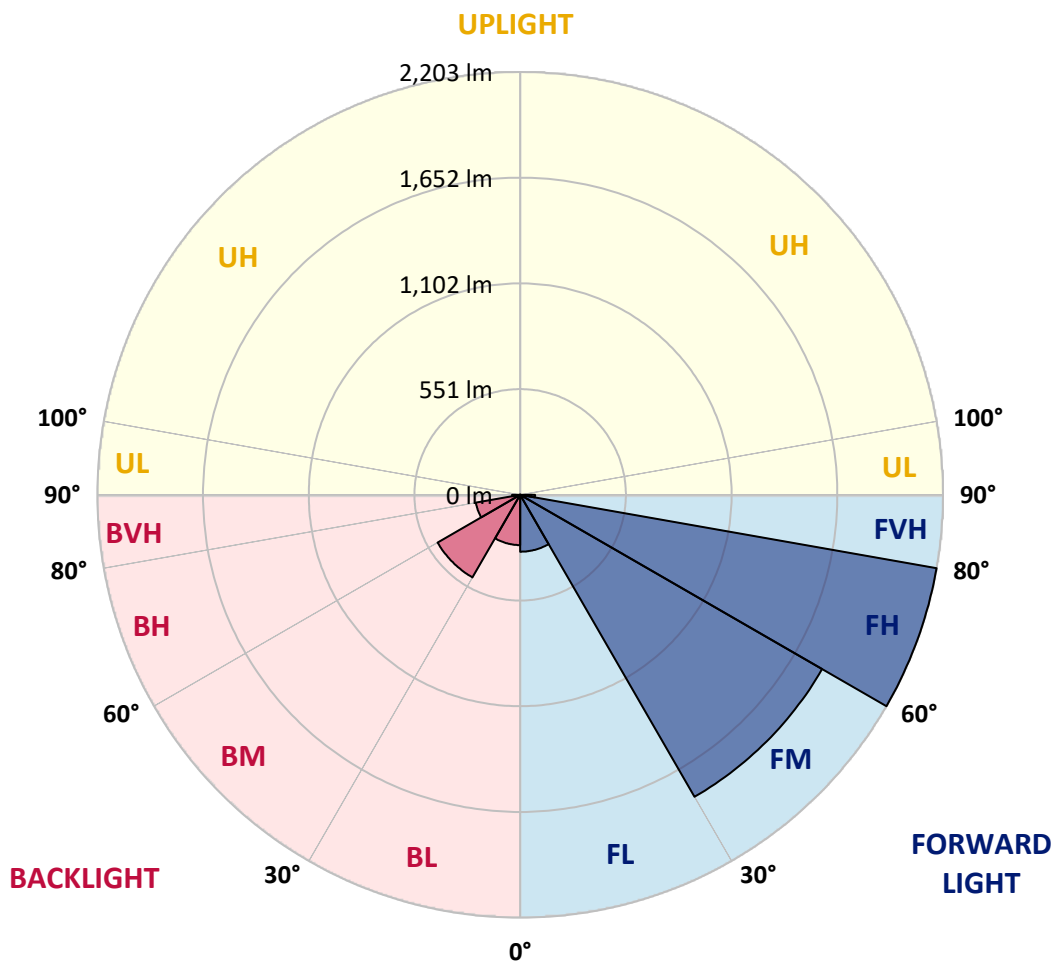
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.6	5.5			
FM	(30°-60°)	1816.6	33.5			
FH	(60°-80°)	2203.1	40.6			G2/5000
FVH	(80°-90°)	77.3	1.4			G1/100
BL	(0°-30°)	262.0	4.8	B1/500		
BM	(30°-60°)	496.9	9.2	B1/1000		
BH	(60°-80°)	234.3	4.3	B1/500		G1/500
BVH	(80°-90°)	42.3	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4
2.5°	787.1	788.6	786.8	789.2	793.1	797.3	800.1	804.3	809.0	815.5	817.1
5°	750.1	752.4	752.4	756.6	764.1	770.9	777.2	784.0	793.9	805.1	809.5
7.5°	709.4	710.7	713.0	719.3	730.2	739.9	748.8	759.7	773.3	788.1	795.9
10°	660.4	662.2	665.9	674.7	689.6	702.9	715.6	730.8	748.0	766.5	776.4
12.5°	625.7	625.2	626.7	633.3	646.3	662.5	681.0	700.3	721.4	743.0	755.0
15°	614.0	611.1	605.1	603.5	610.6	626.7	648.1	671.8	697.1	723.2	738.1
17.5°	621.3	616.3	599.9	587.9	586.9	599.1	621.8	648.4	677.6	709.4	727.9
20°	667.2	655.4	615.0	587.1	577.5	583.5	603.3	631.4	665.9	708.1	731.8
22.5°	776.9	759.7	673.9	622.1	589.5	582.2	597.0	627.0	667.2	724.3	754.5
25°	936.7	912.2	775.1	709.1	641.9	603.0	606.4	637.2	685.7	761.8	798.3
27.5°	1062.9	1047.0	907.3	831.9	737.3	659.3	636.9	662.7	723.5	823.3	860.6
30°	1138.0	1128.4	1048.6	971.1	859.0	749.0	695.3	710.7	782.7	908.6	939.3
32.5°	1225.1	1219.3	1180.2	1109.1	990.4	866.9	787.9	782.4	861.9	1011.0	1025.1
35°	1315.3	1313.5	1290.5	1239.4	1131.5	1022.2	910.7	873.6	948.2	1117.4	1108.5
37.5°	1399.2	1396.1	1382.8	1353.1	1279.0	1189.1	1035.8	967.2	1041.3	1219.1	1179.7
40°	1553.8	1529.3	1483.7	1461.3	1428.2	1329.6	1135.1	1054.6	1137.7	1316.1	1241.2
42.5°	1742.3	1702.4	1617.4	1586.7	1582.0	1440.4	1202.9	1139.3	1235.0	1412.3	1301.7
45°	1890.7	1853.1	1779.9	1741.0	1758.2	1540.8	1271.0	1229.8	1335.1	1513.2	1364.0
47.5°	2048.9	1990.0	1893.0	1904.7	1942.3	1635.7	1340.3	1327.0	1444.9	1626.0	1441.5
50°	2054.7	2009.5	1967.1	2037.2	2095.6	1723.0	1427.1	1428.9	1579.1	1768.1	1544.4
52.5°	1935.5	1925.9	1993.4	2103.7	2187.9	1792.1	1525.9	1534.3	1750.9	1931.3	1657.6
55°	1893.8	1882.8	1960.8	2080.5	2200.4	1849.2	1633.1	1648.2	1958.7	2103.4	1767.9
57.5°	1995.5	1971.2	1976.4	2069.5	2169.9	1911.8	1749.9	1780.4	2184.5	2253.8	1838.8
60°	2279.6	2227.8	2129.2	2126.9	2186.3	2005.6	1884.9	1922.2	2419.1	2325.8	1811.1
62.5°	2678.3	2626.4	2441.8	2321.6	2312.8	2160.5	2050.7	2060.6	2554.7	2228.3	1642.5
65°	3109.7	3063.3	2857.1	2687.4	2605.5	2417.0	2243.4	2122.4	2510.4	1960.0	1347.3
67.5°	3633.5	3583.7	3406.4	3249.7	3171.0	2831.0	2378.7	2063.3	2229.1	1518.4	968.5
70°	3999.8	3949.0	3879.1	4006.1	4198.7	3428.3	2396.2	1822.6	1664.9	1009.2	582.9
72.5°	3521.9	3498.2	3625.7	4160.4	4962.9	3790.7	2166.0	1327.0	967.0	535.8	337.4
73°	3226.8	3221.6	3439.0	4052.2	4968.3	3734.9	2065.1	1233.4	829.3	474.0	308.4
75°	1457.1	1499.1	1975.7	3095.1	4316.6	3077.7	1453.5	707.6	468.5	327.5	232.8
77.5°	350.1	364.7	618.1	1469.9	2726.0	1834.1	658.6	349.9	299.6	231.2	170.0
80°	149.1	154.1	238.0	543.1	1283.5	738.6	303.5	234.4	207.3	161.4	119.1
82.5°	82.9	88.1	135.0	246.4	518.0	251.8	185.1	163.2	136.4	97.2	77.4
85°	46.9	49.8	79.0	137.7	219.5	101.2	110.8	108.5	76.9	50.1	38.1
87.5°	22.2	24.0	38.1	63.9	86.0	39.6	56.3	62.0	48.2	30.5	19.8
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°	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4	819.4
2.5°	818.9	823.6	829.1	831.9	834.5	837.7	840.8	840.8	841.3	841.6
5°	813.2	822.8	831.4	835.1	835.8	835.8	835.1	830.9	827.2	828.8
7.5°	801.2	815.2	822.5	821.2	811.3	799.9	790.2	778.5	772.5	771.4
10°	784.0	800.1	801.4	788.4	763.9	739.4	719.0	699.2	689.8	687.5
12.5°	764.9	779.8	771.4	744.6	705.2	669.5	643.7	623.6	614.8	612.4
15°	749.5	759.7	738.6	696.4	646.8	609.0	587.6	572.8	566.5	564.7
17.5°	741.5	743.5	705.0	647.9	595.2	563.7	550.4	543.3	541.0	539.7
20°	745.4	730.8	672.9	602.8	553.0	530.8	527.7	525.9	525.3	524.5
22.5°	764.9	726.9	643.4	560.0	515.9	506.3	508.9	508.6	508.1	507.6
25°	799.9	730.2	614.8	519.3	484.9	482.8	487.5	487.5	485.4	485.4
27.5°	846.0	737.3	582.7	480.7	456.8	457.0	460.7	459.6	457.3	455.7
30°	902.3	741.7	545.1	446.1	430.4	429.4	430.4	426.0	419.0	418.4
32.5°	959.9	736.2	501.6	415.3	402.5	400.2	399.4	393.2	385.1	382.7
35°	1012.1	716.2	457.3	390.8	375.9	370.7	374.4	372.3	365.0	363.2
37.5°	1050.1	678.9	417.4	369.2	356.9	355.6	358.0	358.7	350.1	348.3
40°	1075.7	628.3	383.2	350.9	353.3	348.3	340.5	335.0	332.4	331.6
42.5°	1096.3	575.6	354.6	342.3	354.0	339.7	322.8	313.9	318.6	320.7
45°	1120.0	524.3	330.6	331.6	350.1	329.8	310.5	301.9	303.7	304.2
47.5°	1152.6	461.7	304.8	314.4	337.1	323.0	302.9	290.7	282.1	278.2
50°	1197.7	387.7	277.9	295.1	324.3	318.1	291.2	278.2	262.3	258.6
52.5°	1229.0	318.6	255.8	279.0	312.9	308.2	281.8	264.9	248.2	245.1
55°	1212.0	264.6	236.5	261.0	297.7	295.9	274.0	251.3	238.3	235.7
57.5°	1127.3	230.5	221.6	244.0	279.2	285.5	263.6	239.9	230.5	228.6
60°	965.7	209.1	212.2	232.6	264.1	275.0	253.1	233.6	227.3	226.0
62.5°	749.3	194.8	205.2	224.2	252.4	267.7	247.4	232.8	230.5	228.9
65°	536.8	183.3	197.6	215.9	241.7	261.0	245.3	231.8	232.3	231.0
67.5°	364.7	173.1	188.5	206.5	231.2	255.0	242.5	228.1	234.6	233.1
70°	255.2	163.2	177.8	194.5	218.2	246.6	237.2	222.6	222.1	215.9
72.5°	199.2	150.2	163.2	177.8	201.5	234.9	226.8	210.4	201.8	195.3
73°	190.1	147.0	159.6	174.2	197.9	232.0	223.9	207.0	197.4	191.4
75°	157.2	133.5	145.0	158.0	182.2	218.5	209.9	191.6	179.4	175.7
77.5°	123.6	114.2	125.1	136.9	160.6	198.7	189.0	171.5	164.8	161.6
80°	91.5	94.6	104.3	114.7	139.2	177.5	168.9	151.5	181.7	174.2
82.5°	64.4	71.7	80.6	89.9	116.8	156.9	146.5	128.5	133.0	110.5
85°	38.1	46.9	55.3	63.4	84.2	130.1	121.0	102.5	83.9	80.0
87.5°	22.2	26.1	28.4	36.8	57.9	98.0	85.3	75.9	43.5	29.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)