

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: P299255

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-SL2-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27077.2 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 226
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



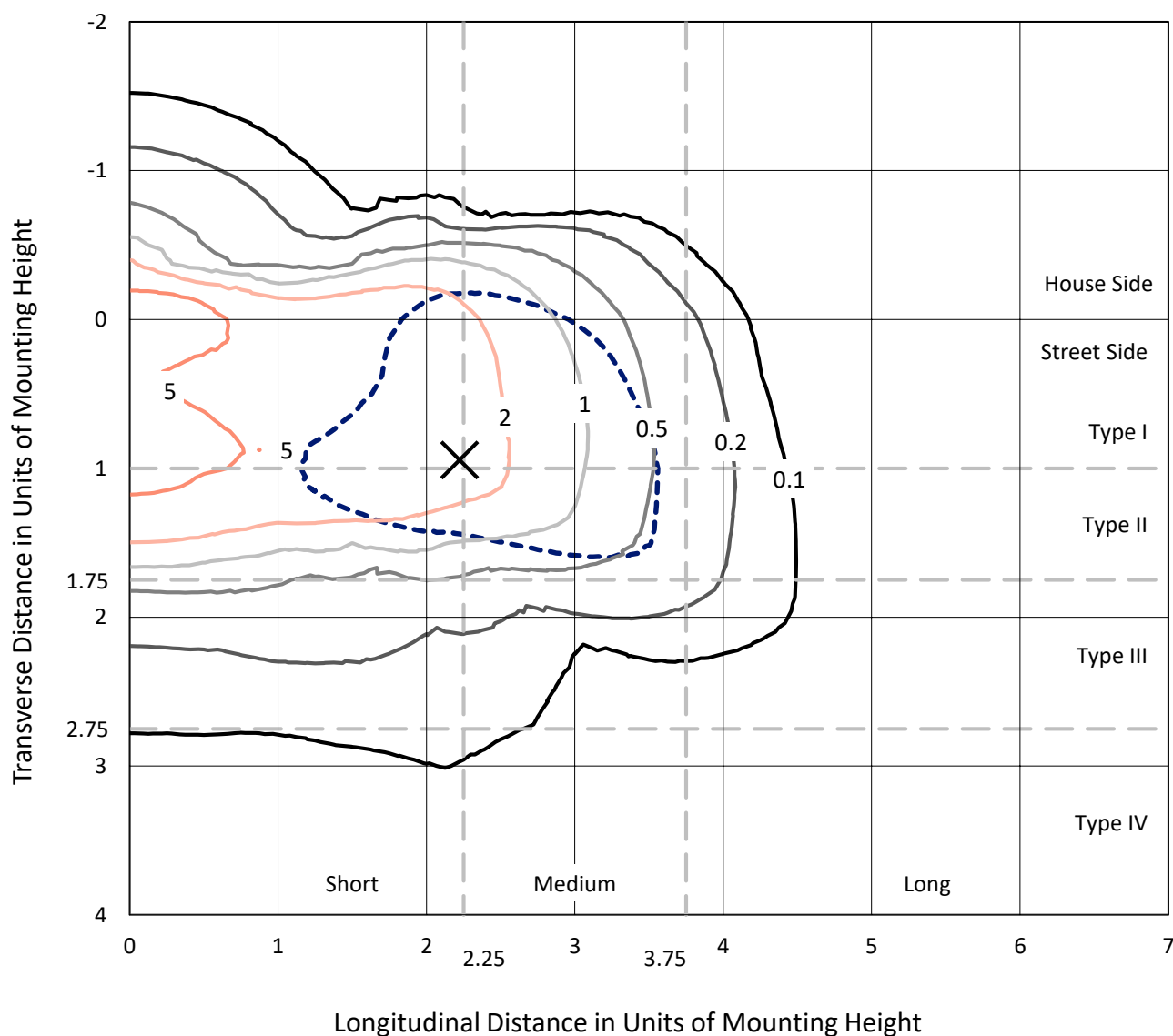
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

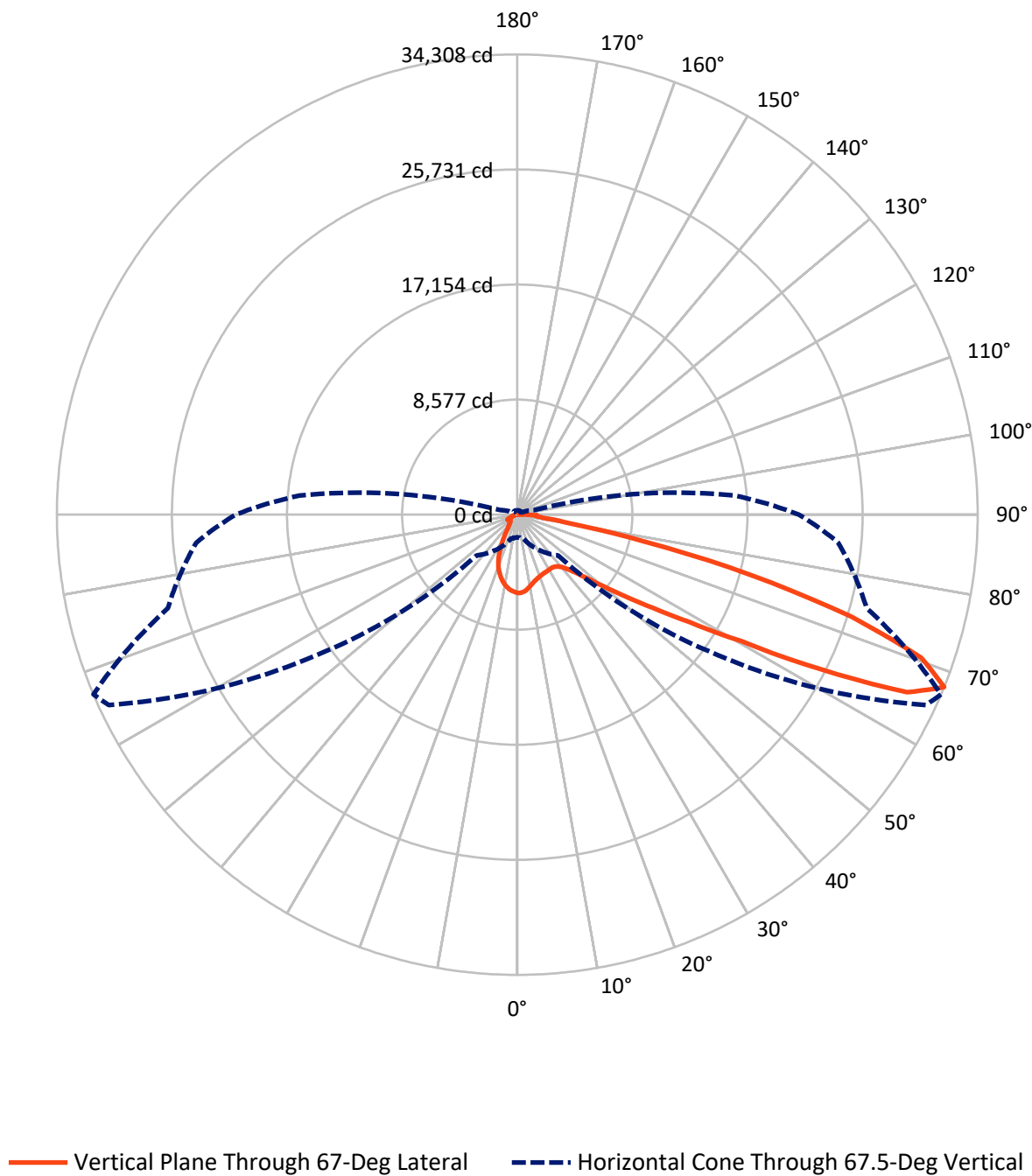


Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4486.4	0.0	4486.4
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	22590.8	0.0	22590.8
	% Fixture	83.4	0.0	83.4
Total	Lumens	27077.2	0.0	27077.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	498.3	1.8
10°-20°	1152.9	4.3
20°-30°	1562.8	5.8
30°-40°	2221.7	8.2
40°-50°	3717.0	13.7
50°-60°	5880.3	21.7
60°-70°	7490.9	27.7
70°-80°	3923.7	14.5
80°-90°	629.3	2.3
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°	27077.2	100.0
0°-180°	27077.2	100.0

Coefficient of Utilization



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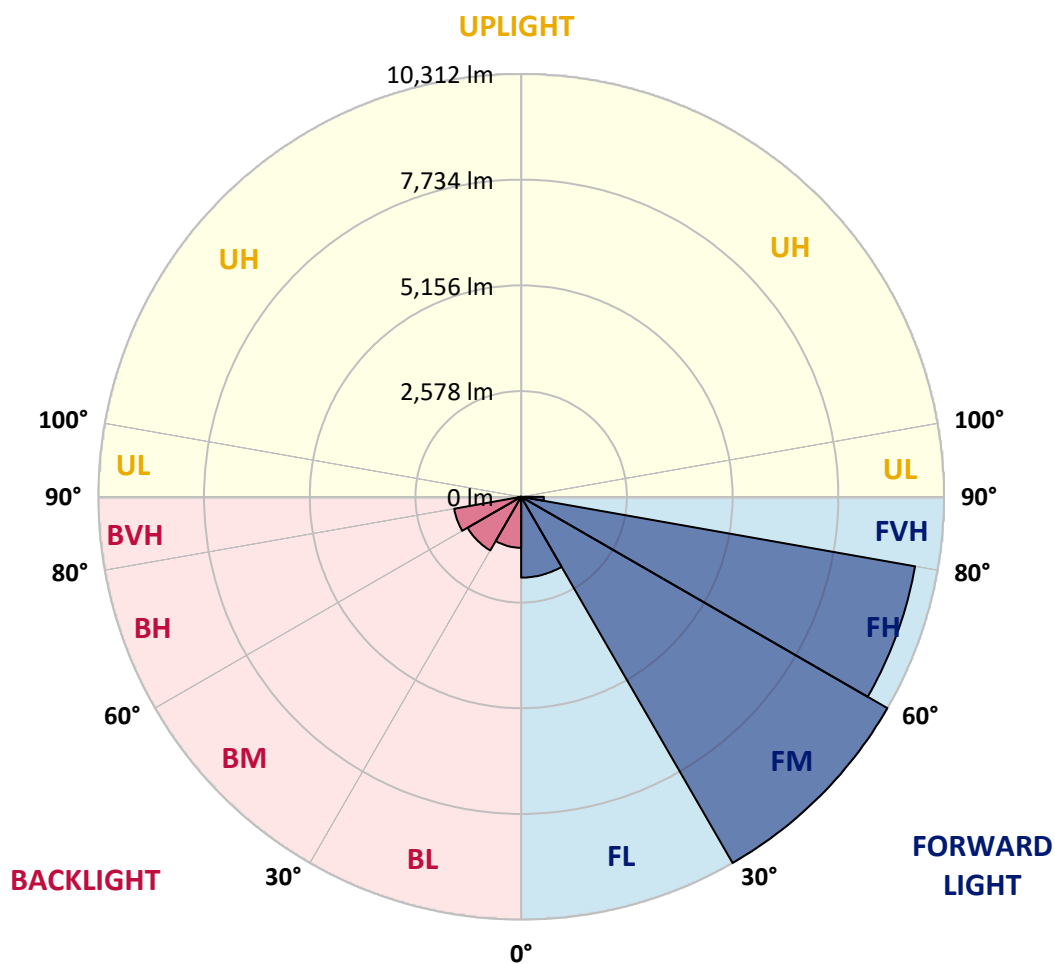
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1970.6	7.3			
FM	(30°-60°)	10311.5	38.1			
FH	(60°-80°)	9755.3	36.0			G4/12000
FVH	(80°-90°)	553.3	2.0			G4/750
BL	(0°-30°)	1243.5	4.6	B3/2500		
BM	(30°-60°)	1507.6	5.6	B2/2500		
BH	(60°-80°)	1659.4	6.1	B3/2500		G3/2500
BVH	(80°-90°)	76.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5
2.5°	5600.1	5609.5	5638.8	5657.5	5741.7	5777.7	5803.1	5828.5	5832.5	5844.5	5832.5
5°	5012.6	5032.6	5087.4	5148.8	5311.7	5439.9	5574.8	5715.0	5740.3	5831.1	5856.5
7.5°	4557.3	4551.9	4597.3	4670.8	4837.7	5015.3	5251.6	5530.7	5585.4	5789.7	5888.5
10°	4224.8	4220.8	4268.9	4345.0	4503.9	4672.1	4939.2	5321.1	5398.5	5724.3	5919.3
12.5°	3979.1	3980.4	4028.5	4112.6	4274.2	4443.8	4714.8	5118.1	5216.9	5648.2	5951.3
15°	3816.2	3826.9	3865.6	3955.1	4112.6	4282.2	4547.9	4965.9	5076.7	5588.1	5987.4
17.5°	3761.5	3778.8	3792.2	3857.6	3992.5	4162.0	4422.4	4853.7	4971.2	5546.7	6019.4
20°	3812.2	3832.2	3806.9	3829.6	3915.0	4064.6	4323.6	4765.6	4885.8	5500.0	6023.4
22.5°	4029.8	4048.5	3973.8	3908.3	3903.0	3993.8	4242.2	4696.1	4820.3	5465.3	6024.7
25°	4413.1	4425.1	4299.6	4147.4	3999.1	3968.4	4184.7	4648.1	4780.3	5434.6	5999.4
27.5°	4883.1	4892.4	4748.2	4523.9	4226.1	4028.5	4164.7	4620.0	4757.6	5407.8	5956.6
30°	5454.6	5498.6	5305.0	5022.0	4588.0	4206.1	4204.8	4605.3	4732.2	5362.4	5872.5
32.5°	6039.4	6058.1	5924.6	5637.5	5075.4	4518.6	4316.9	4616.0	4725.5	5307.7	5765.7
35°	6632.3	6656.3	6569.5	6338.5	5741.7	4976.6	4535.9	4678.8	4766.9	5289.0	5690.9
37.5°	7400.1	7432.1	7311.9	7044.9	6552.2	5597.5	4900.4	4836.4	4893.8	5342.4	5668.2
40°	8613.8	8599.1	8248.0	7850.1	7438.8	6391.9	5421.2	5103.4	5136.8	5514.7	5737.7
42.5°	10026.5	9990.5	9385.6	8760.7	8413.5	7353.3	6110.2	5566.7	5560.1	5853.8	5982.0
45°	11153.5	11124.1	10579.3	9808.9	9531.2	8448.3	7000.8	6257.1	6207.7	6391.9	6433.3
47.5°	11763.7	11765.1	11451.3	10822.4	10815.7	9839.6	8145.2	7255.9	7170.4	7257.2	7213.1
50°	11550.1	11578.1	11544.8	11344.5	11988.1	11663.6	9639.3	8648.5	8476.3	8561.8	8392.2
52.5°	10516.6	10552.6	10750.3	11057.4	12480.8	13868.1	11834.5	10379.1	10178.8	10148.1	9959.8
55°	8684.6	8728.7	9131.9	9966.5	12070.8	15348.9	15298.2	12584.9	12265.8	11976.0	11895.9
57.5°	5986.0	6059.5	6708.4	7947.5	10744.9	15796.3	19422.8	15729.5	15080.5	14068.4	14087.1
60°	3374.2	3459.7	4224.8	5350.4	8069.0	15310.2	22560.7	20492.4	19122.4	16518.6	16657.5
62.5°	2145.8	2237.9	2818.8	3717.4	4841.7	12693.1	23846.6	27114.0	25374.1	19539.0	19675.2
65°	1737.2	1777.2	2051.0	3068.5	3515.8	7647.1	22870.5	32568.6	31919.6	23372.6	22737.0
67.5°	1695.8	1709.1	1850.7	2575.7	3371.6	4298.2	18242.5	33588.7	34308.4	26952.4	24012.2
70°	1675.8	1722.5	2085.7	2458.2	3228.7	3625.3	10962.6	30792.7	31929.0	27888.5	22315.0
72.5°	813.2	810.5	1049.5	2223.2	3637.3	3760.1	5632.2	24914.8	26055.1	24161.7	18337.3
75°	655.6	599.5	572.8	814.5	3497.1	3883.0	3589.2	17143.5	17968.7	16199.5	11272.4
77.5°	622.2	555.5	508.7	510.1	1478.1	4118.0	3040.4	9488.4	9728.8	7317.3	3088.5
80°	515.4	454.0	420.6	474.0	715.7	3921.7	3287.4	4294.2	3940.4	1797.3	1028.2
82.5°	357.9	325.8	316.5	397.9	572.8	2794.7	3822.9	2307.3	1934.8	900.0	634.3
85°	228.3	194.9	216.3	289.8	446.0	1289.9	3937.7	1798.6	1430.1	571.5	357.9
87.5°	105.5	85.5	106.8	160.2	291.1	444.6	3746.8	2020.3	1472.8	301.8	225.7
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°	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5	5840.5
2.5°	5843.1	5817.8	5797.7	5760.4	5719.0	5678.9	5642.9	5597.5	5584.1	5572.1	5590.8
5°	5861.8	5836.5	5763.0	5648.2	5521.3	5402.5	5283.7	5182.2	5119.4	5084.7	5104.7
7.5°	5889.9	5853.8	5701.6	5490.6	5262.3	5054.0	4839.0	4666.8	4539.9	4479.8	4497.2
10°	5915.2	5845.8	5597.5	5281.0	4947.2	4637.4	4298.2	4017.8	3809.5	3700.0	3726.7
12.5°	5925.9	5815.1	5451.9	5019.3	4561.3	4107.3	3607.9	3188.6	2889.5	2780.0	2757.3
15°	5936.6	5780.4	5291.7	4721.5	4095.3	3453.0	2753.3	2251.3	2002.9	1948.2	1936.1
17.5°	5939.3	5720.3	5110.1	4398.4	3549.1	2674.5	1882.7	1563.6	1564.9	1653.1	1663.7
20°	5911.2	5630.8	4889.8	3996.5	2894.9	1849.3	1292.5	1237.8	1439.4	1659.7	1686.4
22.5°	5847.2	5512.0	4640.1	3527.8	2145.8	1217.8	1000.1	1060.2	1320.6	1590.3	1621.0
25°	5765.7	5367.8	4345.0	2984.3	1420.7	870.6	838.5	912.0	1088.2	1268.5	1285.9
27.5°	5654.9	5196.9	4013.8	2362.1	922.7	717.0	738.4	787.8	859.9	940.0	948.0
30°	5512.0	4992.6	3660.0	1722.5	697.0	644.9	675.6	702.4	733.1	778.5	782.5
32.5°	5347.8	4796.3	3296.8	1189.7	618.2	607.5	631.6	644.9	669.0	697.0	699.7
35°	5210.2	4609.4	2920.2	841.2	584.8	579.5	595.5	600.9	623.6	654.3	657.0
37.5°	5131.4	4457.1	2531.7	678.3	562.1	554.1	563.5	563.5	595.5	640.9	647.6
40°	5136.8	4373.0	2143.1	612.9	543.5	532.8	534.1	534.1	575.5	624.9	628.9
42.5°	5282.3	4394.4	1798.6	587.5	528.8	516.7	510.1	514.1	548.8	580.8	583.5
45°	5624.2	4545.3	1475.5	571.5	514.1	510.1	495.4	494.1	507.4	522.1	522.1
47.5°	6185.0	4843.0	1256.5	560.8	502.1	500.7	483.4	466.0	464.7	470.0	470.0
50°	7097.0	5355.8	1109.6	548.8	494.1	483.4	463.3	436.6	427.3	431.3	431.3
52.5°	8464.3	6270.4	1053.5	532.8	476.7	459.3	436.6	409.9	401.9	403.3	403.3
55°	10257.5	7675.1	1045.5	514.1	458.0	430.0	411.3	391.2	381.9	384.6	384.6
57.5°	12448.7	9618.0	1188.4	484.7	432.6	400.6	389.9	376.5	369.9	373.9	372.5
60°	15112.6	12160.3	1762.6	454.0	407.3	373.9	373.9	363.2	357.9	361.9	360.5
62.5°	18181.0	15080.5	2478.3	431.3	380.6	352.5	357.9	352.5	347.2	349.8	348.5
65°	20902.3	16983.3	2320.7	413.9	353.8	332.5	341.8	339.2	335.2	337.8	336.5
67.5°	20981.1	16278.3	1303.2	395.2	328.5	312.5	325.8	324.5	321.8	324.5	323.1
70°	18724.5	13745.3	734.4	360.5	301.8	288.4	307.1	305.8	303.1	308.4	307.1
72.5°	15001.8	9974.5	536.8	317.8	275.1	263.0	284.4	283.1	283.1	291.1	287.1
75°	8632.5	5132.8	428.6	272.4	247.0	237.7	256.4	257.7	260.4	271.1	263.0
77.5°	2460.9	1599.7	349.8	231.0	212.3	208.3	227.0	229.7	231.0	243.0	232.3
80°	914.7	737.1	288.4	193.6	173.6	174.9	192.3	196.3	197.6	209.6	196.3
82.5°	583.5	486.0	233.7	149.6	136.2	134.9	156.2	161.6	161.6	162.9	154.9
85°	340.5	291.1	176.3	108.2	96.1	92.1	116.2	125.5	121.5	118.8	113.5
87.5°	228.3	200.3	108.2	60.1	52.1	49.4	68.1	74.8	72.1	68.1	64.1
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)