

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: P299858

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299858  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-08-LED-E1-SL3-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Medium OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45987.9 lumens  
Efficiency: N/A  
Efficacy: 103.3 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G5

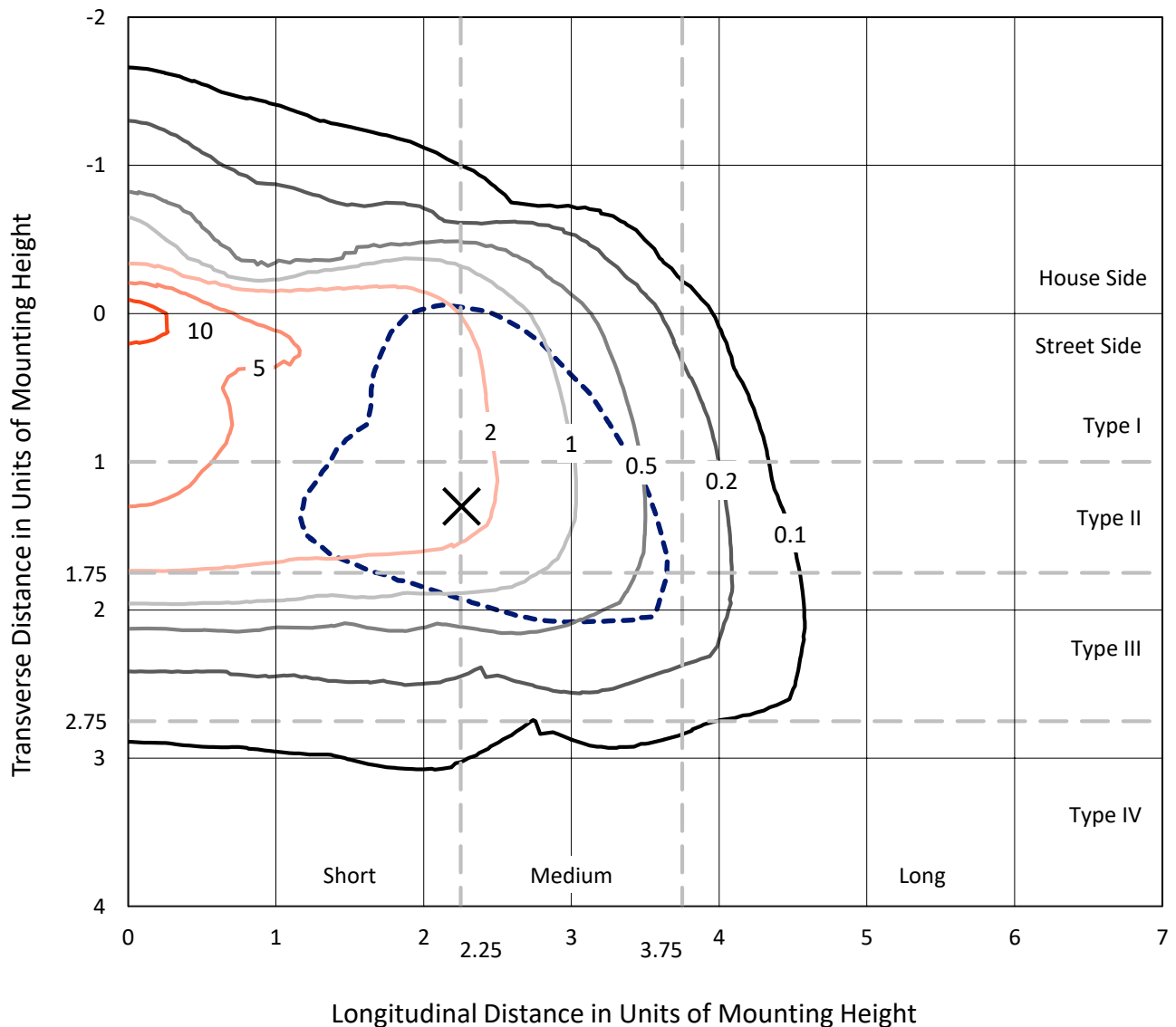
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

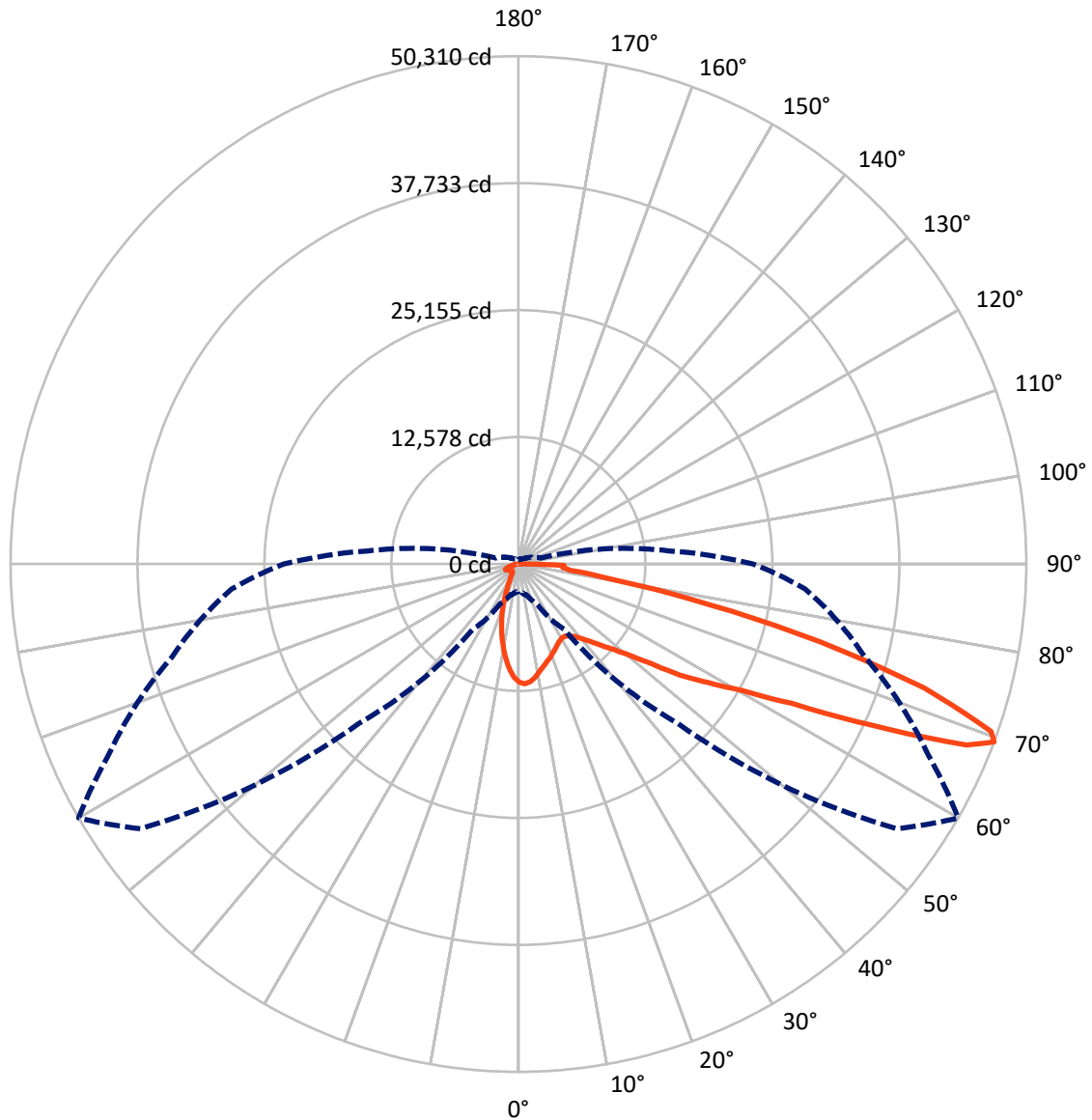
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6542.6	0.0	6542.6
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	39445.3	0.0	39445.3
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	45987.9	0.0	45987.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	990.8	2.2
10°-20°	2111.0	4.6
20°-30°	2689.8	5.8
30°-40°	3697.8	8.0
40°-50°	6000.1	13.0
50°-60°	9622.6	20.9
60°-70°	12807.0	27.8
70°-80°	6914.8	15.0
80°-90°	1153.8	2.5
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°	45987.9	100.0
0°-180°	45987.9	100.0

**Coefficient of Utilization**



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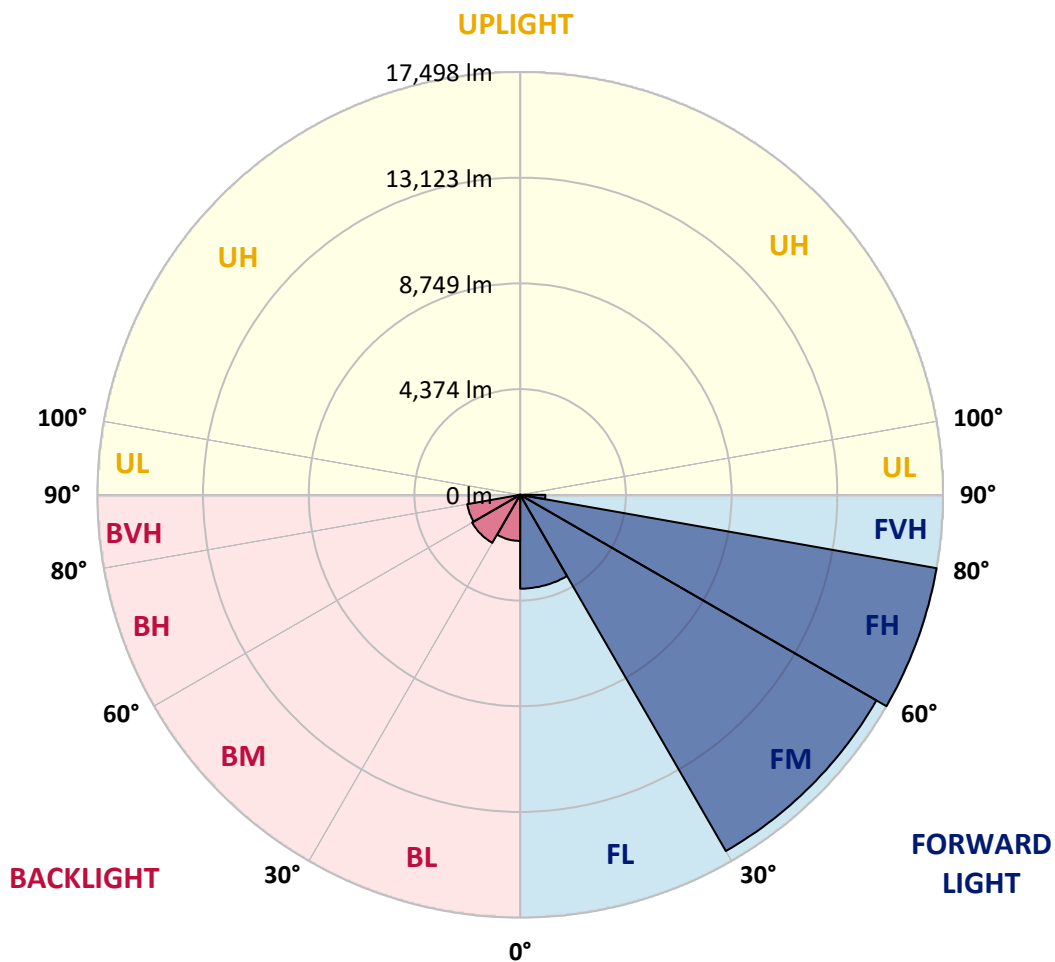
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3883.0	8.4			
FM	(30°-60°)	17022.0	37.0			
FH	(60°-80°)	17497.5	38.0			G5
FVH	(80°-90°)	1042.7	2.3			G5
BL	(0°-30°)	1908.7	4.2	B3/2500		
BM	(30°-60°)	2298.6	5.0	B2/2500		
BH	(60°-80°)	2224.3	4.8	B3/2500		G3/2500
BVH	(80°-90°)	111.1	0.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4
2.5°	11958.3	11985.0	11973.9	11967.2	11987.2	11956.1	11891.7	11871.7	11840.6	11767.3	11642.9
5°	11509.6	11589.6	11585.1	11645.1	11745.1	11771.7	11742.9	11747.3	11689.5	11598.5	11391.9
7.5°	10734.3	10767.6	10785.4	10916.5	11098.6	11245.2	11369.6	11409.6	11383.0	11305.2	11038.6
10°	9934.6	9961.2	10003.4	10156.7	10387.7	10589.9	10825.4	10960.9	11018.6	11005.3	10707.6
12.5°	9248.1	9274.8	9330.3	9503.6	9779.0	10027.9	10370.0	10538.8	10676.5	10758.7	10438.8
15°	8632.8	8690.5	8743.8	8943.8	9252.6	9579.1	9965.7	10178.9	10392.2	10576.6	10201.1
17.5°	8152.9	8210.7	8241.8	8423.9	8752.7	9152.6	9605.8	9856.8	10123.4	10425.5	9965.7
20°	7875.2	7901.9	7888.5	7990.7	8286.2	8710.5	9248.1	9539.1	9861.2	10283.3	9730.2
22.5°	7797.5	7799.7	7750.8	7739.7	7930.8	8288.4	8866.0	9219.2	9614.7	10190.0	9528.0
25°	7986.3	7979.6	7846.3	7737.5	7757.5	7966.3	8497.2	8908.2	9408.1	10170.0	9372.5
27.5°	8406.2	8426.2	8228.4	8024.1	7821.9	7815.2	8217.3	8650.5	9239.2	10261.1	9305.9
30°	8994.9	9028.2	8817.1	8557.2	8177.3	7864.1	8108.5	8497.2	9134.8	10449.9	9294.8
32.5°	9639.1	9674.6	9514.7	9241.4	8743.8	8166.2	8184.0	8510.6	9130.4	10714.3	9370.3
35°	10325.5	10365.5	10283.3	10052.3	9499.1	8723.8	8472.8	8726.1	9274.8	11118.6	9572.4
37.5°	11092.0	11154.2	11176.4	10956.4	10365.5	9459.1	8946.0	9134.8	9601.3	11680.7	9943.4
40°	12196.0	12282.7	12276.0	11960.6	11358.5	10452.2	9676.9	9725.7	10110.0	12431.5	10536.6
42.5°	14310.9	14328.7	13775.5	13089.1	12451.5	11496.3	10538.8	10498.8	10812.0	13382.3	11409.6
45°	17001.1	16927.8	15697.1	14370.9	13593.4	12695.9	11660.7	11465.2	11702.9	14541.9	12502.6
47.5°	19233.8	19064.9	17509.9	15679.4	14801.9	13999.9	12978.0	12635.9	12767.0	15857.1	13915.5
50°	20009.1	19882.4	18594.0	16767.9	15945.9	15590.5	14599.7	14115.4	14151.0	17425.5	15570.5
52.5°	19842.4	19824.7	18965.0	17485.4	17016.7	17261.1	16896.7	16241.4	15894.8	19167.1	17356.6
55°	19449.2	19487.0	19176.0	18320.7	18240.7	18873.9	19898.0	19413.7	18336.3	20924.3	19202.7
57.5°	18083.0	18180.8	18865.0	19371.5	20211.2	21153.1	22315.0	22177.2	20964.3	22823.7	21397.5
60°	14568.6	14795.2	16630.2	19167.1	22239.4	25185.2	25705.0	25385.1	23674.5	25180.7	24296.6
62.5°	10207.8	10443.3	12624.8	16594.6	21906.2	29739.2	31765.2	30385.7	27566.6	28652.9	28048.7
65°	5464.9	5578.2	7244.3	11514.0	18494.0	30678.9	40622.4	38523.0	33729.0	32933.7	31258.7
67.5°	3014.6	3076.8	3714.3	5813.7	11845.0	27015.7	46265.0	47851.1	41431.0	35783.9	30674.5
69°	2725.8	2783.5	3201.2	4403.0	7926.3	22337.2	45714.0	50310.3	44807.7	35501.8	28515.2
70°	2665.8	2719.1	3094.6	4058.7	6415.7	18411.8	43868.0	49681.6	45611.9	34491.0	26631.4
72.5°	2399.2	2457.0	2821.3	3645.5	5482.7	9179.2	34748.7	42006.4	41411.0	29905.8	20200.1
75°	2237.1	2290.4	2907.9	3570.0	5249.4	5809.2	22908.1	30958.8	30441.2	20919.9	10892.0
77.5°	957.5	953.0	1348.5	3021.2	5327.2	5624.8	12309.3	19340.4	17645.4	8941.5	3127.9
80°	639.8	628.7	639.8	888.6	4885.1	5655.9	6449.0	9816.8	7415.4	2279.3	1541.7
82.5°	550.9	542.0	562.0	542.0	1717.2	6455.7	5482.7	5220.5	3525.5	1295.1	764.2
85°	371.0	355.4	484.3	486.5	810.8	5735.9	6175.8	4409.7	2852.4	768.6	377.7
87.5°	177.7	173.3	282.1	344.3	475.4	2330.4	6928.9	4518.5	2876.8	393.2	179.9
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4	11718.4
2.5°	11605.1	11514.0	11425.2	11318.5	11207.5	11083.1	11020.9	10958.7	10943.1	10925.3	10863.1
5°	11285.2	11156.4	10934.2	10689.9	10432.2	10181.1	9990.1	9870.1	9779.0	9732.4	9650.2
7.5°	10872.0	10683.2	10294.4	9872.3	9439.2	9043.7	8701.6	8486.1	8281.8	8186.2	8077.4
10°	10478.8	10196.7	9592.4	8970.4	8348.4	7750.8	7188.8	6791.1	6437.9	6240.2	6100.2
12.5°	10141.2	9754.6	8917.1	8075.2	7222.1	6371.3	5529.3	4867.3	4314.2	4023.1	3874.3
15°	9812.4	9345.9	8275.1	7206.5	6111.3	4953.9	3847.6	3096.8	2639.1	2457.0	2394.8
17.5°	9514.7	8917.1	7630.9	6331.3	4965.1	3565.5	2585.8	2172.6	1997.1	1937.1	1917.2
20°	9192.6	8483.9	6962.2	5416.0	3769.9	2492.5	2019.3	1837.2	1766.1	1748.3	1739.4
22.5°	8881.6	8057.4	6322.4	4436.3	2708.0	1923.8	1735.0	1659.5	1648.4	1663.9	1663.9
25°	8617.2	7675.3	5631.5	3412.2	1988.2	1619.5	1552.8	1535.1	1577.3	1635.0	1646.1
27.5°	8419.5	7362.1	4896.2	2519.2	1583.9	1408.4	1406.2	1435.1	1539.5	1650.6	1672.8
30°	8284.0	7064.4	4109.8	1817.2	1328.5	1239.6	1275.1	1337.3	1490.6	1648.4	1690.6
32.5°	8215.1	6844.4	3290.0	1406.2	1137.4	1088.5	1148.5	1224.0	1375.1	1521.7	1577.3
35°	8268.4	6682.3	2517.0	1173.0	1004.1	966.4	1028.6	1101.9	1190.7	1252.9	1295.1
37.5°	8468.4	6617.9	1899.4	1050.8	913.0	877.5	926.4	968.6	1004.1	1021.9	1041.9
40°	8899.3	6686.7	1521.7	988.6	861.9	817.5	837.5	853.1	875.3	893.0	901.9
42.5°	9534.7	6893.3	1364.0	964.1	835.3	770.9	766.4	773.1	802.0	835.3	841.9
45°	10423.3	7257.6	1352.9	979.7	822.0	733.1	713.1	722.0	766.4	817.5	826.4
47.5°	11558.5	7813.0	1441.8	1026.3	833.1	713.1	679.8	690.9	746.4	815.3	826.4
50°	12933.6	8588.3	1590.6	1095.2	881.9	717.5	668.7	675.3	733.1	808.6	819.7
52.5°	14557.5	9688.0	1752.8	1161.8	933.0	746.4	677.6	662.0	715.3	782.0	795.3
55°	16363.6	11098.6	1919.4	1221.8	959.7	782.0	695.3	644.2	682.0	737.5	748.6
57.5°	18580.6	13071.3	2208.2	1279.6	977.5	806.4	713.1	626.5	639.8	679.8	688.7
60°	21581.9	15861.5	2716.9	1375.1	1017.4	815.3	710.9	610.9	597.6	619.8	624.2
62.5°	25178.5	18891.6	3141.2	1495.1	1084.1	822.0	697.6	599.8	562.0	562.0	566.5
65°	27313.4	19702.5	2905.7	1595.0	1139.6	815.3	682.0	588.7	535.4	510.9	513.2
67.5°	25502.8	17327.7	2490.3	1615.0	1137.4	784.2	657.6	568.7	508.7	471.0	468.7
69°	23234.7	14950.7	2303.7	1561.7	1084.1	744.2	626.5	546.5	488.7	448.7	446.5
70°	21406.4	13500.1	2181.5	1504.0	1026.3	715.3	602.0	526.5	473.2	435.4	431.0
72.5°	15563.8	8846.0	1863.8	1292.9	846.4	599.8	519.8	462.1	422.1	399.9	395.4
75°	7777.5	4218.6	1512.8	1048.5	648.7	479.8	426.5	386.5	366.5	362.1	359.9
77.5°	2554.7	1932.7	1081.9	782.0	482.1	375.4	344.3	315.5	311.0	324.3	319.9
80°	1404.0	1124.1	686.4	517.6	328.8	275.5	271.0	255.5	262.1	284.4	279.9
82.5°	715.3	584.3	424.3	311.0	222.2	197.7	215.5	206.6	215.5	235.5	233.3
85°	353.2	319.9	268.8	188.8	146.6	126.6	153.3	159.9	164.4	179.9	179.9
87.5°	204.4	188.8	142.2	88.9	73.3	66.6	88.9	86.6	102.2	111.1	108.9
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)