

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: P299132

Luminaire Tested: **GLNA-AF-07-LED-E1-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299132  
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-07-LED-E1-T3-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 40593.7 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

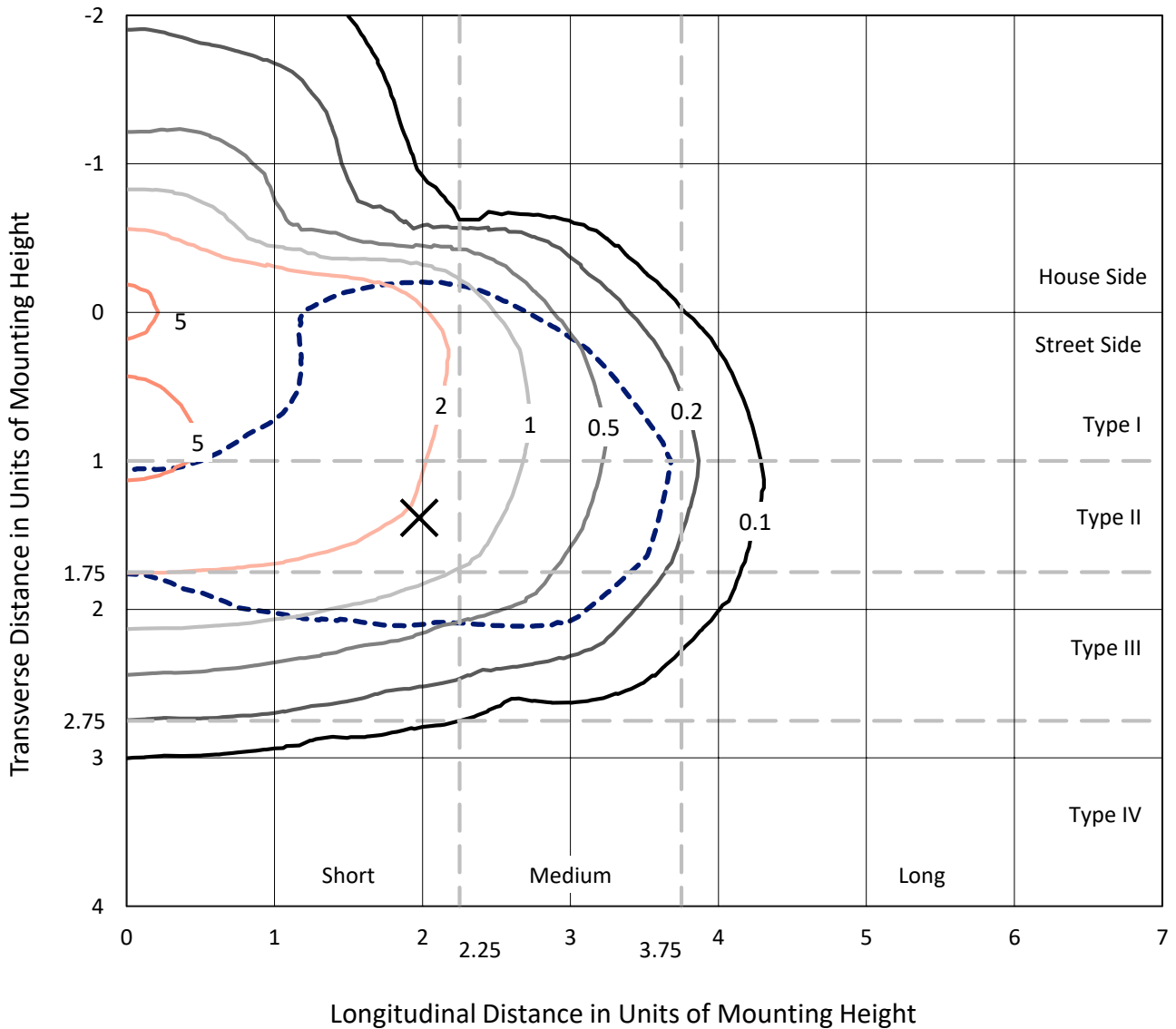
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

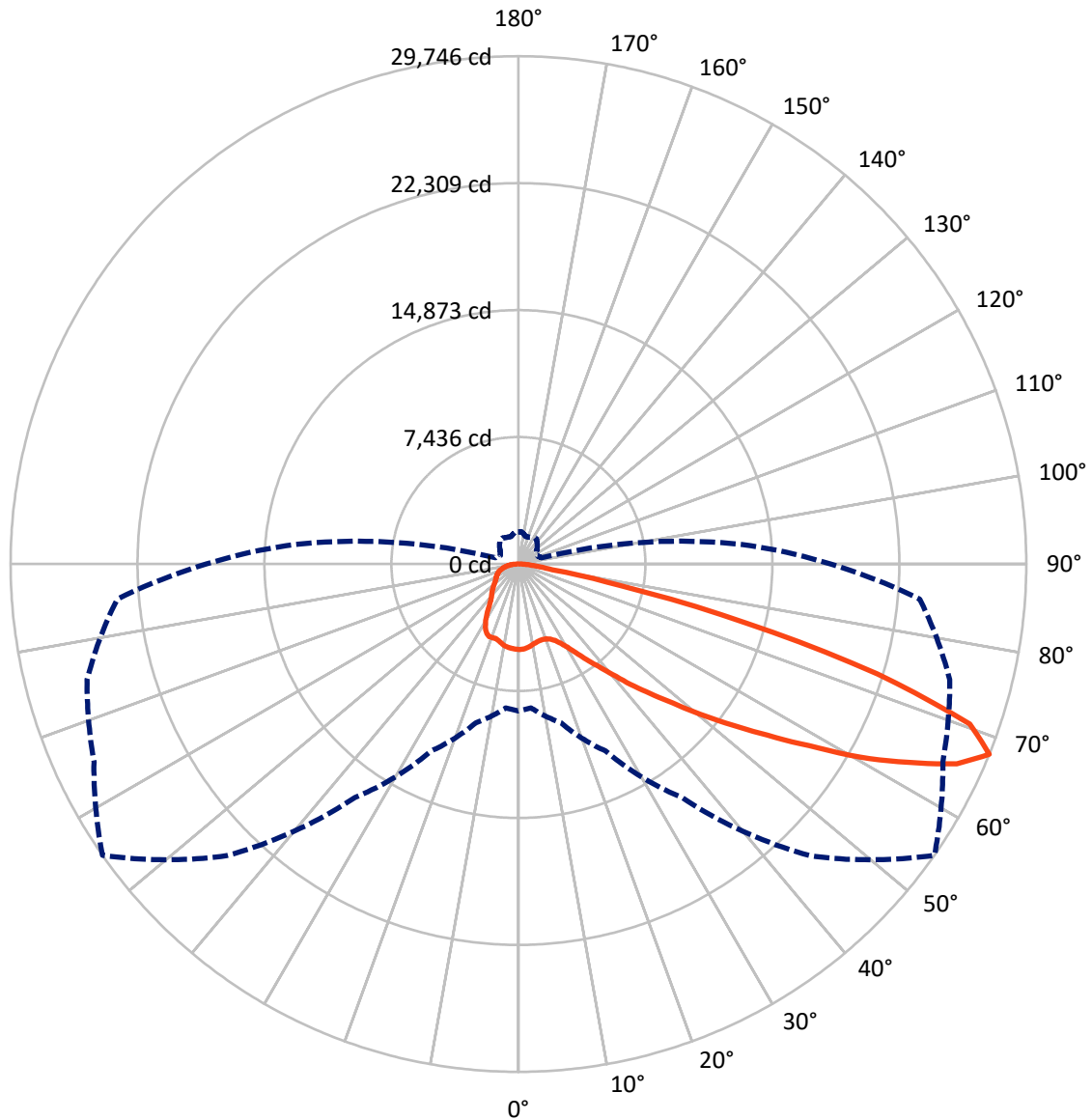
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 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
<b>House Side</b>	Lumens	8769.1	0.0	8769.1
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	31824.6	0.0	31824.6
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	40593.7	0.0	40593.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	467.2	1.2
10°-20°	1323.2	3.3
20°-30°	2216.6	5.5
30°-40°	3645.1	9.0
40°-50°	6135.8	15.1
50°-60°	9657.2	23.8
60°-70°	11524.9	28.4
70°-80°	4949.0	12.2
80°-90°	674.8	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°	40593.7	100.0
0°-180°	40593.7	100.0



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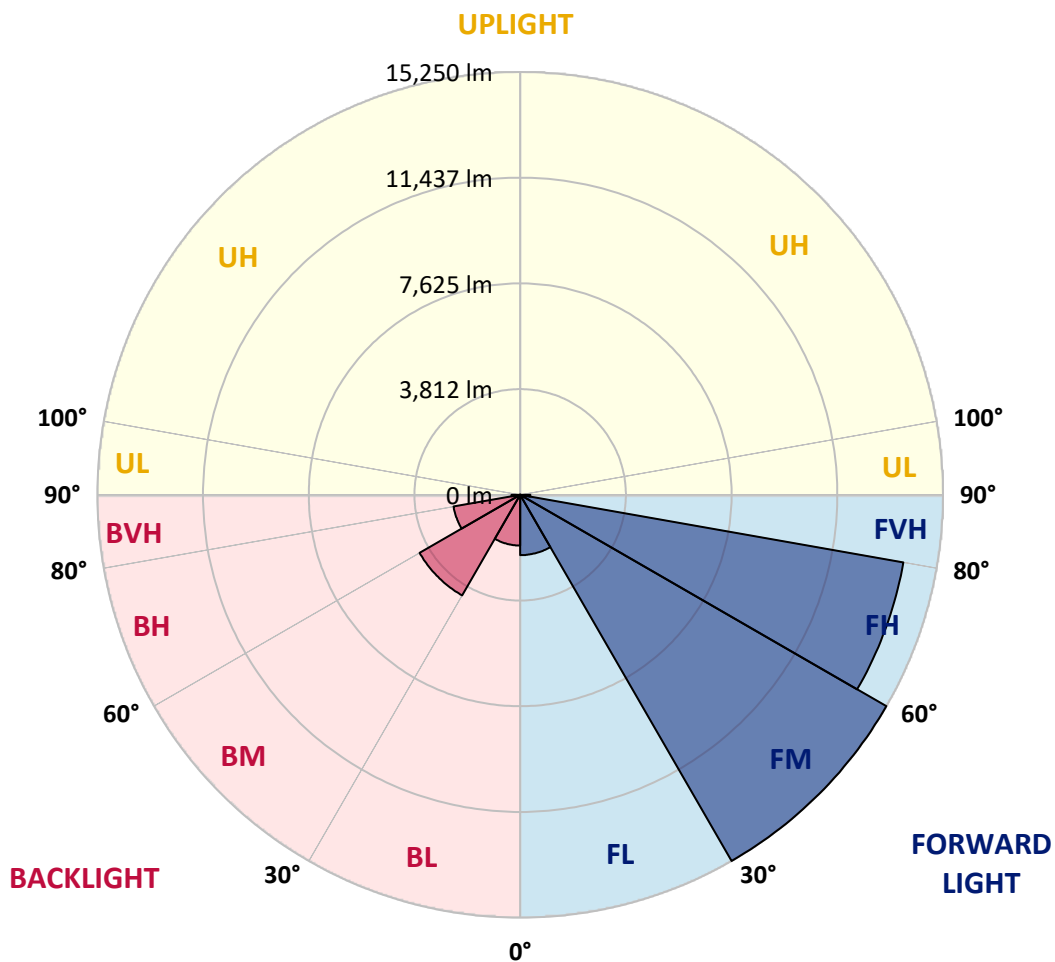
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2175.9	5.4			
FM	(30°-60°)	15250.0	37.6			
FH	(60°-80°)	14033.4	34.6			G5
FVH	(80°-90°)	365.3	0.9			G3/500
BL	(0°-30°)	1831.2	4.5	B3/2500		
BM	(30°-60°)	4188.0	10.3	B3/5000		
BH	(60°-80°)	2440.4	6.0	B3/2500		G3/2500
BVH	(80°-90°)	309.5	0.8			G3/500
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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6
2.5°	4962.5	4964.5	4968.4	4984.1	4997.8	4993.9	4995.8	4988.0	4986.0	4974.3	4986.0
5°	4899.8	4905.7	4907.6	4933.1	4948.8	4952.7	4946.8	4937.0	4925.3	4913.5	4919.4
7.5°	4756.6	4772.3	4774.3	4809.6	4835.1	4868.4	4870.4	4872.3	4866.4	4858.6	4870.4
10°	4666.4	4670.4	4668.4	4693.9	4713.5	4750.8	4772.3	4809.6	4825.3	4829.2	4837.0
12.5°	4660.6	4656.6	4650.8	4650.8	4644.9	4660.6	4699.8	4752.7	4790.0	4801.7	4811.5
15°	4723.3	4721.3	4701.7	4672.3	4635.1	4623.3	4656.6	4715.5	4764.5	4790.0	4799.8
17.5°	4864.5	4852.7	4821.3	4754.7	4674.3	4642.9	4646.8	4695.9	4752.7	4786.1	4795.9
20°	5123.3	5123.3	5056.6	4931.1	4788.0	4713.5	4678.2	4707.6	4762.5	4807.6	4821.3
22.5°	5570.3	5574.2	5462.5	5256.6	5015.5	4856.6	4768.4	4762.5	4827.2	4878.2	4893.9
25°	6203.6	6187.9	6031.1	5737.0	5370.3	5107.6	4954.7	4919.4	4974.3	5031.1	5050.7
27.5°	6940.9	6884.0	6697.7	6342.8	5868.4	5484.1	5248.8	5191.9	5244.9	5309.6	5329.2
30°	7670.2	7611.4	7389.8	7001.6	6474.2	5988.0	5650.7	5558.6	5633.1	5725.2	5737.0
32.5°	8399.6	8399.6	8152.6	7699.6	7125.2	6589.9	6186.0	6076.2	6199.7	6311.5	6337.0
35°	9272.1	9276.0	9036.8	8491.8	7874.1	7307.5	6862.4	6782.0	6968.3	7046.7	7107.5
37.5°	10344.6	10366.2	10058.4	9399.6	8723.1	8127.1	7597.7	7487.9	7674.2	7887.9	8083.9
40°	11503.4	11530.8	11191.6	10379.9	9703.5	9080.0	8507.4	8309.4	8619.2	9027.0	9280.0
42.5°	12609.2	12750.4	12422.9	11587.7	10860.3	10215.2	9634.8	9346.6	9734.8	10350.5	10570.1
45°	14207.2	14309.1	13738.6	12981.7	12297.5	11575.9	10807.3	10503.4	11046.5	11823.0	11868.1
47.5°	15271.8	15195.4	14905.2	14434.6	14001.3	13326.8	12170.0	11836.7	12558.2	13471.9	13219.0
50°	15838.5	15862.0	15822.8	15850.2	15865.9	15442.4	13840.5	13383.7	14244.4	15348.3	14766.0
52.5°	16367.9	16211.0	16340.4	16983.5	17760.0	17603.1	15658.1	15181.6	16052.2	17430.6	16401.2
55°	16356.1	16116.9	16538.4	17673.7	19357.9	19538.3	17699.2	17150.2	17963.9	19663.8	18134.4
57.5°	15777.7	15789.5	16438.4	17924.6	20471.6	21357.8	20067.7	19244.2	19991.2	21926.4	19716.7
60°	14981.7	15089.5	16024.7	17883.5	21363.7	22849.9	22973.4	21501.0	21977.4	23983.2	21026.5
62.5°	13697.4	13811.1	15101.3	17456.0	21228.4	24287.1	25600.8	24061.6	24053.8	25230.2	21410.8
65°	11672.0	11638.7	12993.5	15858.1	20093.2	25349.8	28210.4	26275.2	25618.4	25249.8	20638.2
67.5°	8607.4	8458.4	9621.1	12077.9	16701.2	24159.7	29745.7	27428.1	26151.7	23589.1	18277.6
70°	4466.5	4317.4	5258.6	7052.6	10983.8	18856.0	28045.7	26832.1	24973.3	19773.6	14318.9
72.5°	1909.7	1884.2	2266.6	3094.0	5313.5	10876.0	21991.1	23224.4	21428.4	14732.6	9844.6
75°	1284.3	1276.4	1419.5	1686.2	2390.1	4413.5	13762.1	16485.5	15677.7	9134.9	5537.0
77.5°	1007.8	998.0	1082.3	1211.7	1548.9	1741.1	6107.6	8850.6	8191.8	3976.3	2423.4
80°	788.2	780.4	833.3	903.9	1113.7	1098.0	2009.7	3521.4	2725.4	1523.5	1178.4
82.5°	621.5	621.5	664.7	666.6	790.2	749.0	1049.0	1550.9	1360.7	888.2	721.5
85°	568.6	568.6	613.7	498.0	515.7	472.5	650.9	919.6	862.7	364.7	313.7
87.5°	286.3	278.4	515.7	441.2	280.4	251.0	317.6	445.1	478.4	202.0	156.9
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°	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6	5005.6
2.5°	4982.1	4980.2	4984.1	4986.0	5001.7	5023.3	5033.1	5046.8	5054.7	5050.7
5°	4923.3	4927.2	4942.9	4954.7	4982.1	5017.4	5037.0	5052.7	5066.4	5060.5
7.5°	4874.3	4884.1	4907.6	4917.4	4933.1	4942.9	4940.9	4946.8	4958.6	4944.9
10°	4846.8	4858.6	4876.2	4862.5	4825.3	4772.3	4723.3	4697.8	4705.7	4695.9
12.5°	4819.4	4835.1	4821.3	4756.6	4652.7	4584.1	4546.8	4550.8	4568.4	4572.3
15°	4803.7	4809.6	4750.8	4629.2	4523.3	4513.5	4533.1	4529.2	4531.2	4531.2
17.5°	4803.7	4788.0	4678.2	4556.6	4511.6	4493.9	4433.1	4356.7	4323.3	4311.6
20°	4829.2	4788.0	4654.7	4574.3	4476.3	4325.3	4164.5	4023.3	3960.6	3943.0
22.5°	4905.7	4835.1	4721.3	4582.1	4303.7	4050.8	3795.9	3627.3	3513.6	3494.0
25°	5060.5	4982.1	4852.7	4478.2	4029.2	3668.5	3378.3	3190.0	3076.3	3060.6
27.5°	5331.1	5280.1	4923.3	4248.8	3664.5	3278.3	3009.7	2864.6	2780.3	2774.4
30°	5738.9	5713.5	4888.0	3909.6	3215.5	2899.9	2770.5	2686.1	2623.4	2621.4
32.5°	6389.9	6184.0	4772.3	3495.9	2805.8	2631.2	2578.3	2527.3	2478.3	2478.3
35°	7227.1	6564.4	4552.7	3052.8	2556.7	2482.2	2415.6	2335.2	2270.5	2266.6
37.5°	8211.4	6799.7	4158.6	2696.0	2439.1	2382.2	2284.2	2164.6	2050.9	2031.3
40°	9205.5	6870.3	3603.8	2476.4	2364.6	2282.2	2162.6	2021.5	1911.7	1905.8
42.5°	10117.2	6735.0	3015.5	2325.4	2290.1	2180.3	2054.8	1929.3	1843.1	1841.1
45°	10881.8	6384.0	2521.5	2182.3	2211.7	2088.1	1976.4	1874.4	1807.8	1794.0
47.5°	11601.4	5888.0	2174.4	2031.3	2133.2	2037.2	1943.0	1847.0	1782.3	1772.5
50°	12436.7	5352.7	1931.3	1884.2	2064.6	2019.5	1970.5	1870.5	1762.7	1750.9
52.5°	13448.4	4890.0	1741.1	1754.8	2011.7	2043.0	2041.1	1937.2	1748.9	1733.3
55°	14577.7	4376.3	1598.0	1648.9	1990.1	2086.2	2058.7	1999.9	1760.7	1737.2
57.5°	15689.5	3776.3	1498.0	1568.6	1958.7	2082.3	1974.4	1890.1	1788.2	1754.8
60°	16522.8	2970.4	1421.5	1498.0	1890.1	2017.6	1882.3	1770.5	1782.3	1756.8
62.5°	16577.7	2296.0	1329.3	1437.2	1786.2	1952.8	1821.5	1717.6	1807.8	1784.2
65°	15603.2	1735.2	1241.1	1364.6	1674.4	1911.7	1762.7	1688.2	1860.7	1835.2
67.5°	13136.6	1396.0	1166.6	1290.1	1562.7	1825.4	1709.7	1660.7	1907.8	1862.7
70°	9483.9	1190.1	1094.1	1199.9	1462.7	1727.4	1662.7	1611.7	1780.3	1709.7
72.5°	5838.9	1031.3	1011.7	1080.3	1386.2	1625.4	1592.1	1519.5	1603.8	1547.0
75°	2915.5	894.1	919.6	962.7	1278.4	1509.7	1474.4	1401.9	1413.7	1401.9
77.5°	1396.0	764.7	811.7	845.1	1139.2	1378.4	1341.1	1266.6	1252.9	1254.8
80°	884.3	639.2	684.3	707.8	1017.6	1225.4	1188.2	1113.7	1270.5	1178.4
82.5°	552.9	519.6	531.3	574.5	886.2	1066.6	1017.6	950.9	1145.0	905.8
85°	305.9	362.7	378.4	415.7	682.3	892.1	843.1	758.8	680.4	668.6
87.5°	182.3	215.7	221.6	249.0	458.8	645.1	570.6	541.2	449.0	447.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)