

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: P458972

Luminaire Tested: **GALN-SA4D-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29173 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

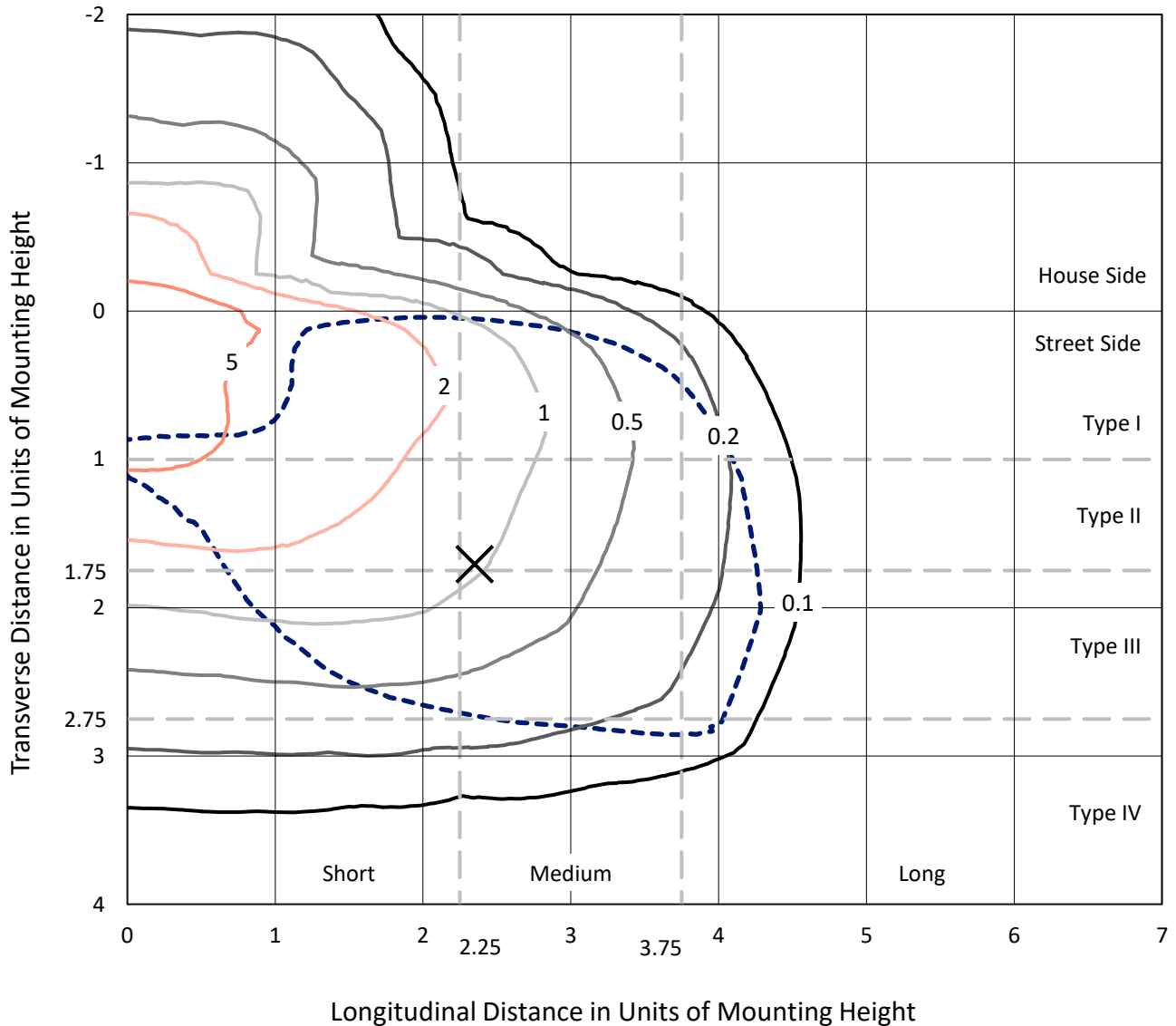
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

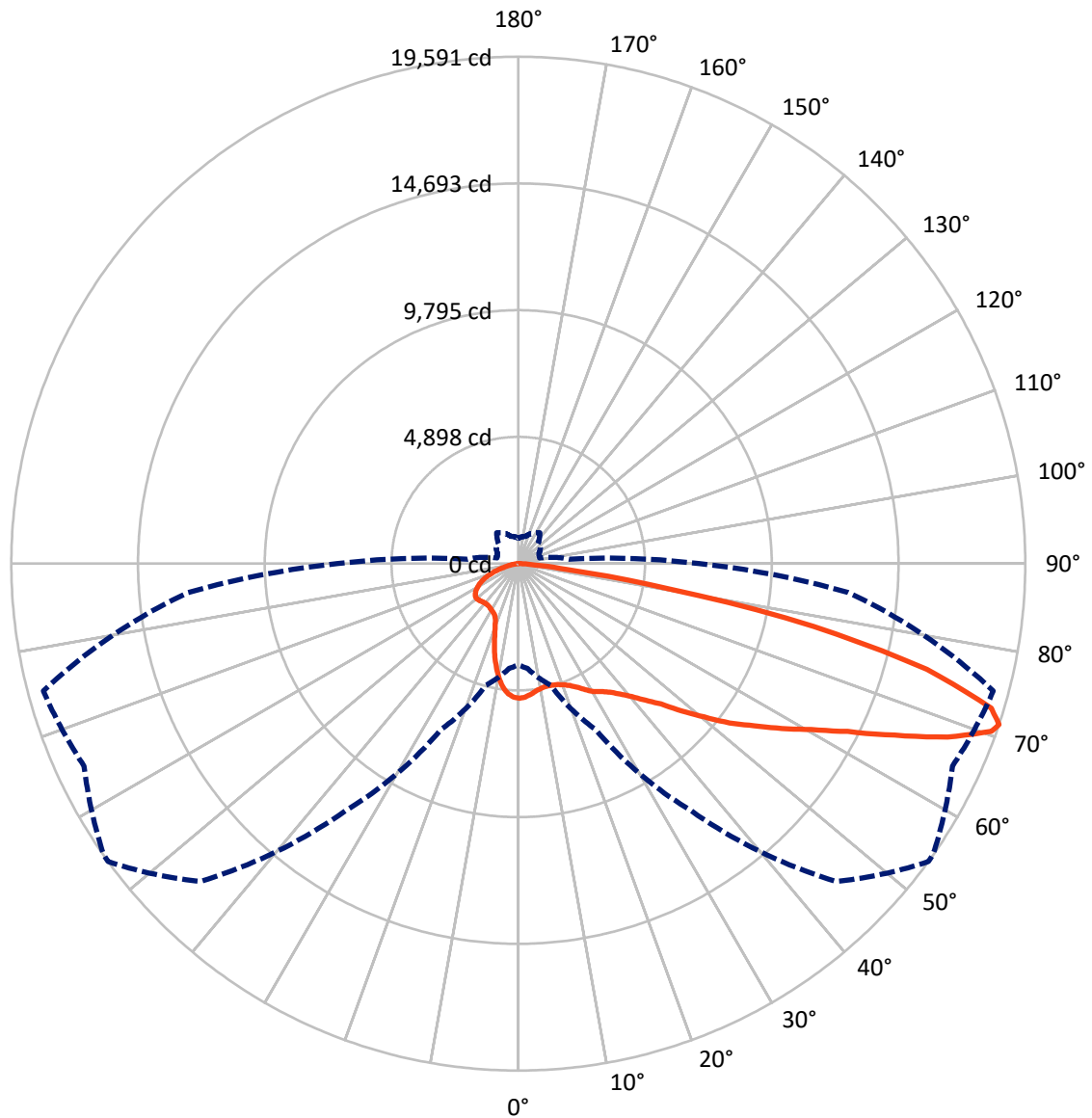
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5267.0	0.0	5267.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	23906.0	0.0	23906.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	29173.0	0.0	29173.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	463.8	1.6
10°-20°	1224.8	4.2
20°-30°	2039.3	7.0
30°-40°	3015.4	10.3
40°-50°	4247.3	14.6
50°-60°	5687.3	19.5
60°-70°	7168.5	24.6
70°-80°	4896.0	16.8
80°-90°	430.6	1.5
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°	29173.0	100.0
0°-180°	29173.0	100.0

Coefficient of Utilization



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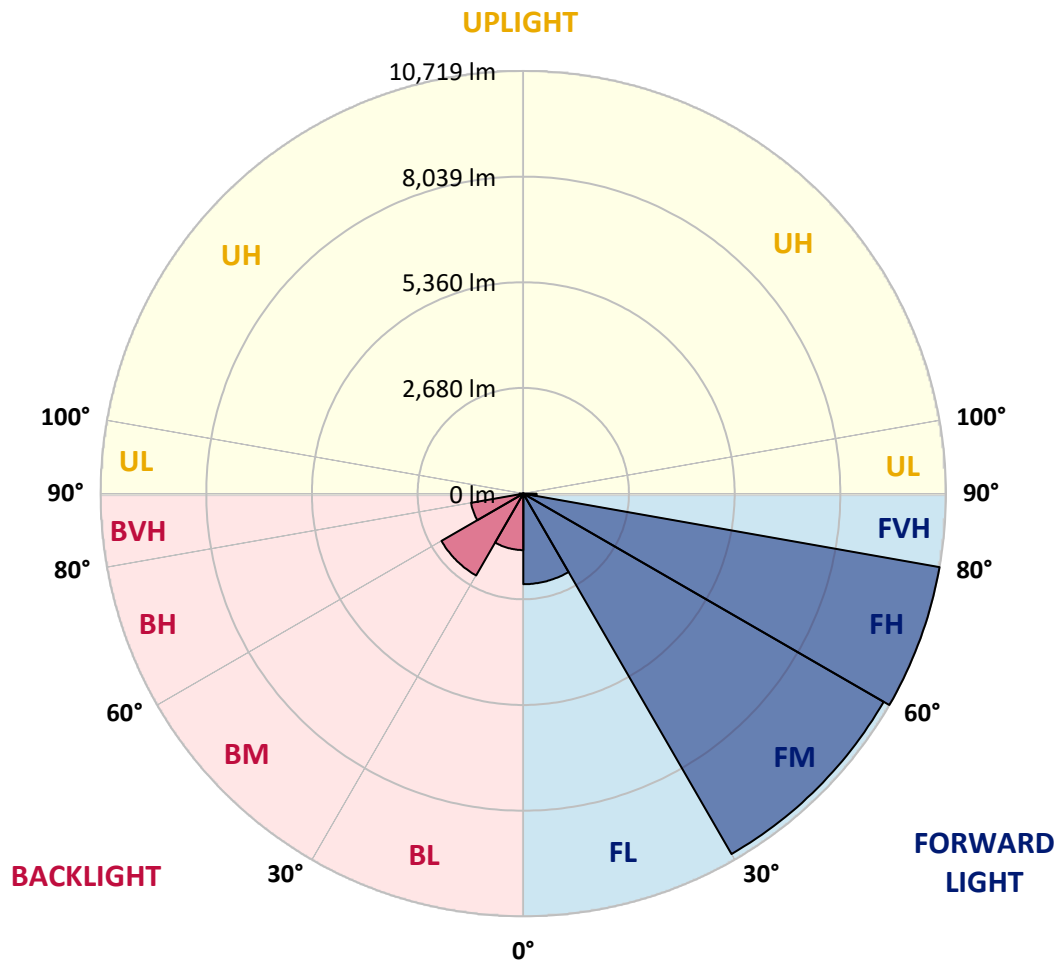
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2296.4	7.9			
FM	(30°-60°)	10553.7	36.2			
FH	(60°-80°)	10719.3	36.7			G4/12000
FVH	(80°-90°)	336.6	1.2			G3/500
BL	(0°-30°)	1431.5	4.9	B3/2500		
BM	(30°-60°)	2396.3	8.2	B2/2500		
BH	(60°-80°)	1345.2	4.6	B3/2500		G3/2500
BVH	(80°-90°)	94.0	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9
2.5°	5028.4	5052.0	5058.3	5074.1	5107.2	5134.0	5160.8	5157.6	5195.4	5211.2	5225.4
5°	4804.6	4810.9	4834.6	4866.1	4924.4	4998.5	5071.0	5072.5	5165.5	5239.6	5275.8
7.5°	4640.8	4661.2	4677.0	4710.1	4771.5	4851.9	4966.9	4976.4	5141.9	5288.4	5365.6
10°	4533.6	4557.2	4574.6	4615.5	4677.0	4766.8	4891.3	4908.6	5124.5	5365.6	5501.1
12.5°	4435.9	4459.5	4475.3	4528.9	4609.2	4719.5	4859.8	4880.3	5130.8	5455.4	5649.3
15°	4495.8	4514.7	4508.4	4524.1	4577.7	4703.8	4872.4	4892.9	5154.5	5542.1	5795.8
17.5°	4762.1	4777.9	4725.8	4666.0	4640.8	4733.7	4911.8	4933.9	5201.7	5631.9	5945.5
20°	5154.5	5197.0	5083.6	4949.6	4828.3	4840.9	4993.7	5017.4	5267.9	5721.8	6098.4
22.5°	5665.0	5696.5	5557.9	5337.3	5113.5	4998.5	5116.6	5130.8	5367.2	5838.4	6265.4
25°	6265.4	6284.3	6092.1	5808.4	5485.4	5267.9	5285.3	5310.5	5531.1	5970.7	6413.5
27.5°	6848.5	6908.3	6686.2	6339.5	5914.0	5551.6	5516.9	5532.7	5709.2	6044.8	6516.0
30°	7540.2	7535.5	7300.7	6898.9	6353.7	5860.4	5735.9	5732.8	5805.3	6081.0	6590.0
32.5°	8091.8	8156.4	7926.3	7488.2	6856.3	6180.3	5887.2	5880.9	5879.3	6144.1	6700.3
35°	8718.9	8728.4	8517.2	8076.0	7400.0	6582.2	6098.4	6066.9	6030.6	6279.6	6850.0
37.5°	9279.9	9324.1	9130.2	8635.4	7934.2	6999.7	6388.3	6367.8	6257.5	6514.4	7089.6
40°	9718.0	9751.1	9634.5	9163.3	8460.5	7450.4	6757.1	6719.2	6585.3	6898.9	7409.5
42.5°	9861.4	9929.2	9974.9	9743.2	9065.6	7984.6	7210.9	7163.6	7061.2	7481.9	7778.2
45°	9872.4	9979.6	10220.7	10231.7	9673.9	8624.4	7740.4	7707.3	7699.4	8228.9	8296.6
47.5°	9788.9	9897.7	10302.6	10521.7	10216.0	9270.5	8504.6	8452.6	8457.4	9152.3	8878.1
50°	9587.2	9716.4	10208.1	10707.6	10639.9	9941.8	9311.5	9294.1	9391.8	10206.5	9481.6
52.5°	9207.4	9363.5	10110.4	10824.2	10955.0	10520.1	10228.6	10179.7	10427.1	11350.5	10141.9
55°	8156.4	8391.2	9752.7	10888.8	11254.4	11073.2	11054.3	11142.5	11470.3	12598.6	10868.4
57.5°	7608.0	7784.5	8975.8	10899.9	11632.6	11716.1	12018.7	12040.8	12614.3	13923.8	11689.3
60°	7308.6	7464.6	8550.3	10827.4	12160.5	12511.9	13005.1	13083.9	13731.6	15359.4	12540.3
62.5°	7047.0	7181.0	8295.1	10576.8	12756.2	13692.2	14283.1	14320.9	15000.1	16944.7	13380.2
65°	6430.9	6583.7	7781.3	10326.3	13269.9	15167.2	15978.7	15934.6	16350.6	18312.5	13906.5
67.5°	5600.4	5794.2	6821.7	9461.2	13523.6	16779.2	17888.6	17833.4	17683.7	19209.1	14057.8
70°	4539.9	4643.9	5594.1	7965.7	12510.3	17625.4	19396.6	19338.3	18509.4	19327.3	13342.4
71°	3906.4	4068.7	4870.8	7075.4	11667.3	17367.0	19590.5	19574.7	18511.0	19001.1	12803.4
72.5°	3049.2	3148.5	3857.6	5482.2	9916.6	15898.3	19111.4	19171.3	18109.2	18095.0	11692.5
75°	1928.8	1972.9	2420.4	3227.3	5441.3	11259.2	16314.3	16476.7	16079.5	14811.0	8695.3
77.5°	1120.4	1177.1	1449.7	1902.0	2351.1	6111.0	11673.6	11850.1	11172.5	8154.8	3559.8
80°	652.4	715.4	954.9	1104.6	1079.4	2267.6	5943.9	6244.9	4837.7	2059.6	999.1
82.5°	362.4	405.0	671.3	672.9	575.2	740.6	1870.5	1957.2	1380.4	830.5	408.1
85°	263.2	297.8	433.3	392.4	275.8	318.3	650.8	682.3	557.8	349.8	132.4
87.5°	93.0	132.4	237.9	189.1	75.6	66.2	187.5	152.9	141.8	97.7	29.9
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°	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9	5204.9
2.5°	5233.3	5236.4	5220.7	5192.3	5163.9	5127.7	5086.7	5055.2	5041.0	5039.4	5037.9
5°	5290.0	5297.9	5238.0	5149.7	5052.0	4932.3	4829.9	4713.2	4683.3	4636.0	4650.2
7.5°	5381.4	5376.7	5258.5	5071.0	4842.5	4588.8	4374.4	4250.0	4120.7	4084.5	4086.1
10°	5512.2	5482.2	5258.5	4910.2	4528.9	4152.3	3852.9	3663.8	3561.3	3476.2	3444.7
12.5°	5650.8	5575.2	5208.0	4684.9	4125.5	3663.8	3342.3	3087.0	3020.8	2951.5	2953.1
15°	5783.2	5657.2	5108.8	4368.1	3690.5	3142.2	2830.2	2677.3	2656.8	2664.7	2663.1
17.5°	5903.0	5715.5	4957.5	4015.2	3183.1	2694.6	2529.2	2540.2	2595.4	2634.8	2639.5
20°	6024.3	5750.1	4732.2	3542.4	2704.1	2423.6	2429.9	2516.6	2600.1	2653.7	2661.5
22.5°	6139.3	5765.9	4467.4	3085.4	2357.4	2308.6	2401.5	2494.5	2576.4	2628.4	2636.3
25°	6215.0	5729.6	4092.4	2608.0	2187.2	2267.6	2365.3	2444.1	2513.4	2567.0	2579.6
27.5°	6235.5	5613.0	3627.5	2221.9	2108.4	2228.2	2318.0	2376.3	2429.9	2480.3	2489.8
30°	6224.4	5441.3	3116.9	1995.0	2062.7	2182.5	2251.8	2294.4	2359.0	2398.4	2406.3
32.5°	6207.1	5241.1	2584.3	1873.6	2024.9	2139.9	2180.9	2218.7	2217.2	2201.4	2212.4
35°	6213.4	5001.6	2152.6	1801.1	1991.8	2108.4	2143.1	2095.8	1960.3	1954.0	1947.7
37.5°	6246.5	4765.2	1839.0	1750.7	1974.5	2103.7	2122.6	1905.2	1785.4	1730.2	1716.1
40°	6331.6	4489.5	1632.5	1712.9	1972.9	2139.9	2029.6	1809.0	1579.0	1471.8	1463.9
42.5°	6445.1	4218.4	1506.5	1689.3	1991.8	2195.1	1991.8	1673.5	1423.0	1359.9	1350.5
45°	6613.7	3908.0	1437.1	1678.2	2020.2	2215.6	1979.2	1574.2	1359.9	1309.5	1309.5
47.5°	6804.3	3611.8	1399.3	1670.4	2056.4	2201.4	1867.3	1542.7	1330.0	1336.3	1366.2
50°	6993.4	3354.9	1371.0	1653.0	2087.9	2193.5	1821.6	1541.1	1337.9	1418.2	1471.8
52.5°	7212.5	3173.7	1336.3	1624.7	2087.9	2143.1	1807.5	1572.7	1359.9	1383.6	1407.2
55°	7477.2	3116.9	1292.2	1563.2	2050.1	2017.0	1799.6	1618.4	1375.7	1320.5	1330.0
57.5°	7827.0	3208.3	1249.6	1486.0	1963.5	1886.2	1796.4	1631.0	1339.4	1293.7	1284.3
60°	8233.6	3389.6	1237.0	1407.2	1845.3	1774.4	1777.5	1594.7	1289.0	1241.7	1249.6
62.5°	8518.8	3498.3	1229.1	1347.3	1716.1	1651.4	1731.8	1550.6	1266.9	1226.0	1233.9
65°	8518.8	3365.9	1156.6	1255.9	1549.0	1503.3	1676.7	1495.4	1238.6	1191.3	1183.4
67.5°	8195.8	2979.9	1046.3	1118.8	1364.7	1334.7	1599.4	1429.3	1196.0	1159.8	1140.9
70°	7354.3	2259.7	907.7	958.1	1131.4	1158.2	1500.2	1339.4	1125.1	1081.0	1052.6
71°	6984.0	1968.2	849.4	876.1	1041.6	1081.0	1452.9	1301.6	1093.6	1030.6	980.2
72.5°	6270.1	1657.8	761.1	772.1	890.3	961.2	1353.6	1229.1	1033.7	943.9	887.2
75°	4763.7	1210.2	613.0	606.7	658.7	762.7	1145.6	1095.2	906.1	784.8	751.7
77.5°	2058.0	658.7	458.6	463.3	447.5	578.3	901.4	940.8	776.9	638.2	608.3
80°	624.0	379.8	313.6	319.9	299.4	387.6	635.1	737.5	624.0	496.4	455.4
82.5°	319.9	226.9	214.3	211.2	190.7	219.0	384.5	504.3	446.0	310.4	274.2
85°	138.7	121.3	105.6	102.4	89.8	78.8	137.1	252.1	236.4	173.3	165.5
87.5°	34.7	31.5	20.5	18.9	11.0	1.6	0.0	0.0	0.0	0.0	0.0
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)