

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: P454682

Luminaire Tested: **GALN-SA5D-740-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454682
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-740-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38655 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

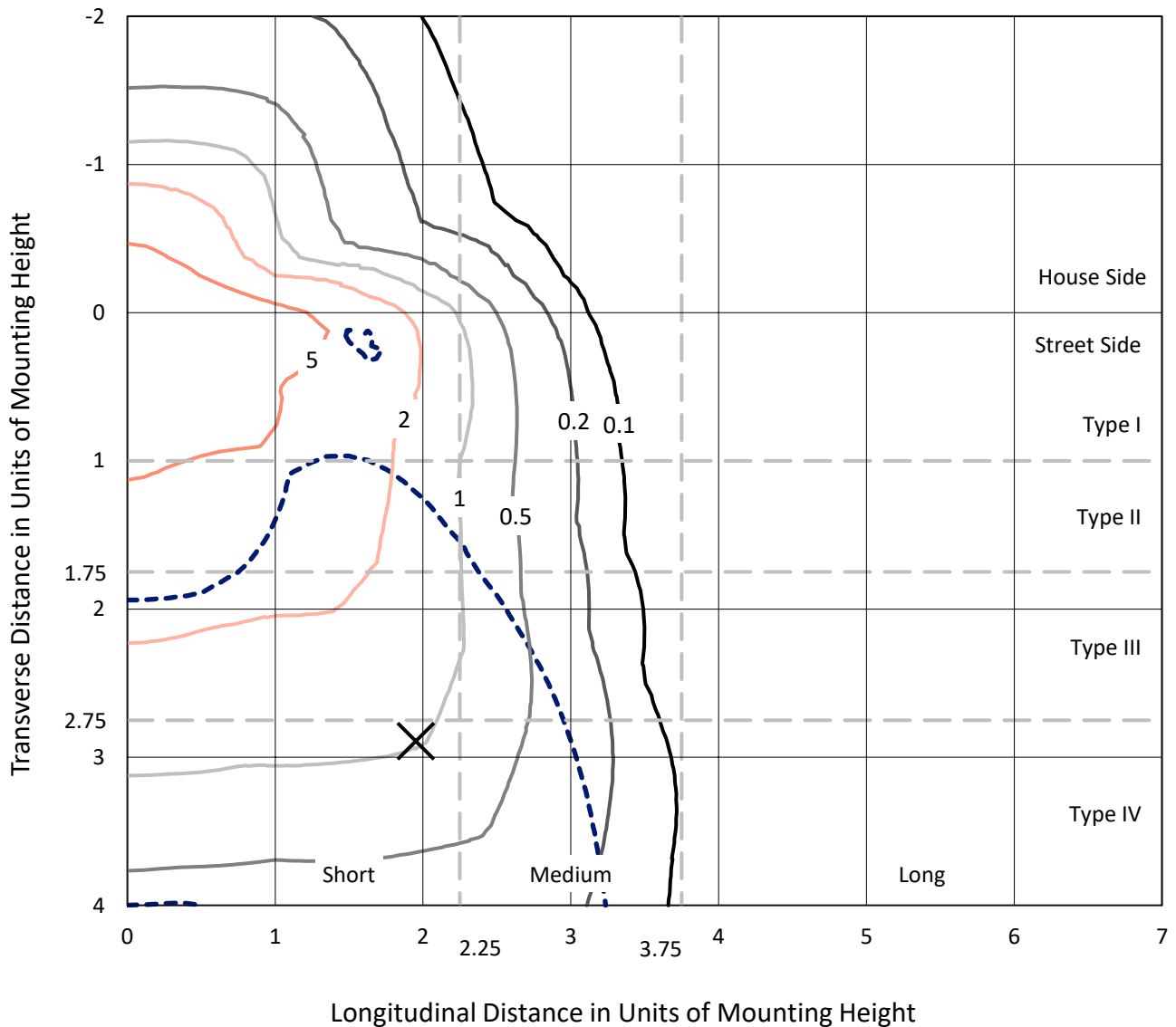
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

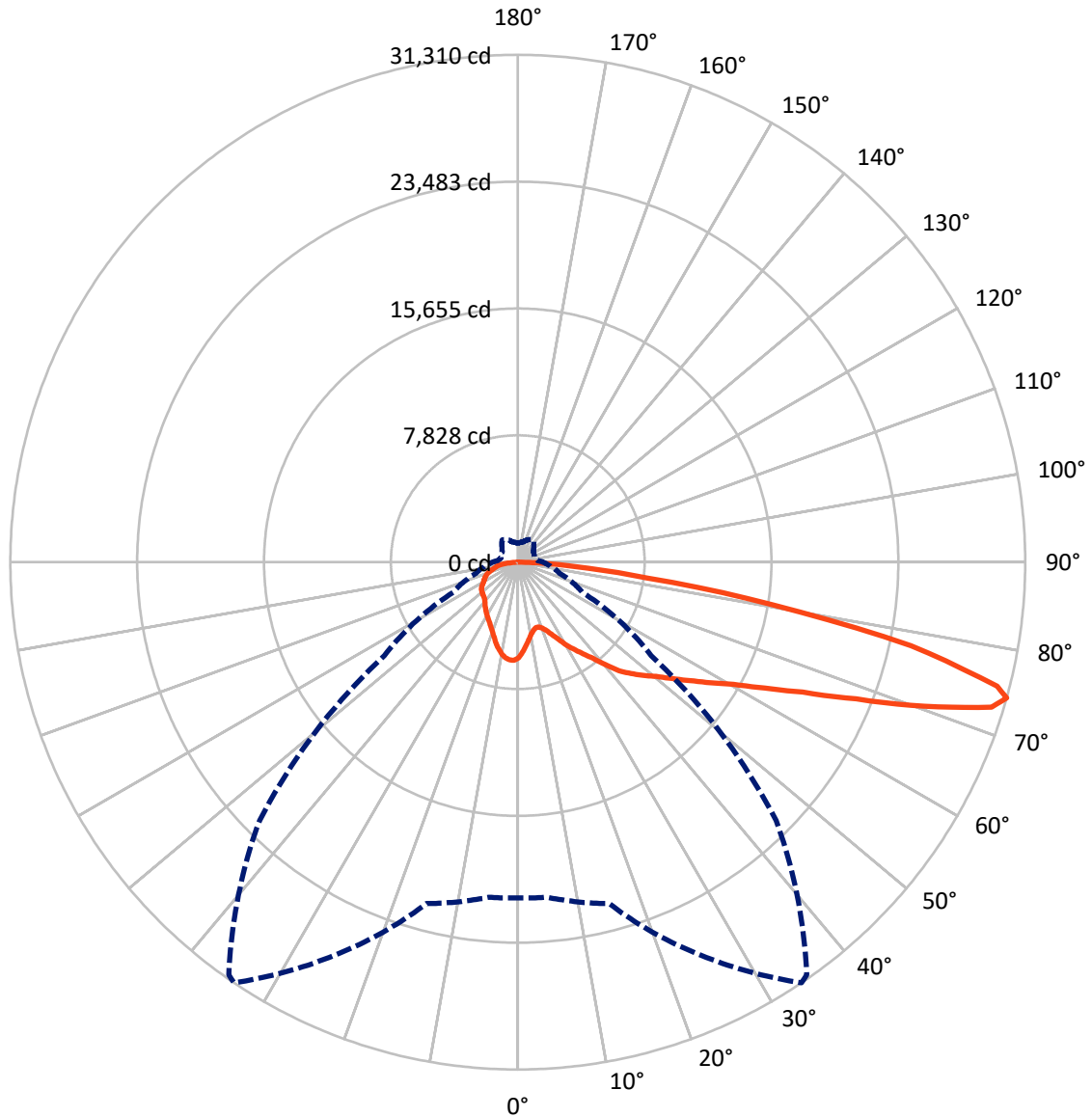
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8226.1	0.0	8226.1
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	30428.9	0.0	30428.9
	% Fixture	78.7	0.0	78.7
Total	Lumens	38655.0	0.0	38655.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	536.8	1.4
10°-20°	1469.3	3.8
20°-30°	2422.5	6.3
30°-40°	3628.7	9.4
40°-50°	5275.1	13.6
50°-60°	7368.1	19.1
60°-70°	9224.4	23.9
70°-80°	7627.9	19.7
80°-90°	1102.2	2.9
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°	38655.0	100.0
0°-180°	38655.0	100.0



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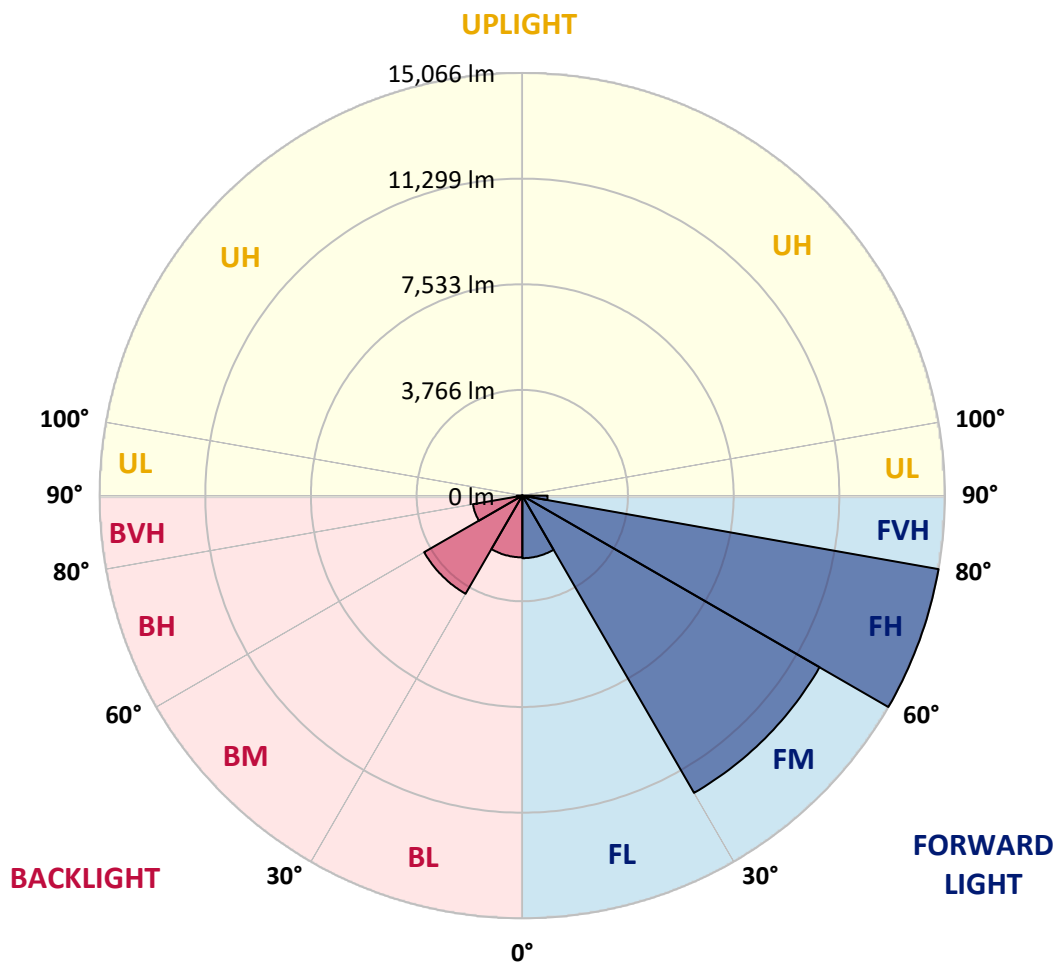
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2228.3	5.8			
FM	(30°-60°)	12232.0	31.6			
FH	(60°-80°)	15065.7	39.0			G5
FVH	(80°-90°)	902.9	2.3			G5
BL	(0°-30°)	2200.3	5.7	B3/2500		
BM	(30°-60°)	4039.8	10.5	B3/5000		
BH	(60°-80°)	1786.6	4.6	B3/2500		G3/2500
BVH	(80°-90°)	199.2	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9
2.5°	5454.3	5482.1	5497.1	5550.7	5563.5	5580.6	5625.6	5685.6	5762.7	5831.2	5891.1
5°	5000.3	5043.1	5068.8	5115.9	5208.0	5216.6	5336.5	5473.6	5629.9	5775.5	5895.4
7.5°	4569.9	4617.0	4638.4	4724.1	4846.1	4865.4	5041.0	5257.3	5518.5	5739.1	5923.3
10°	4246.5	4270.1	4317.2	4381.4	4527.0	4539.9	4769.0	5058.1	5396.5	5722.0	5970.4
12.5°	4070.9	4083.8	4094.5	4163.0	4306.5	4325.7	4565.6	4893.2	5300.1	5734.8	6047.5
15°	4096.6	4100.9	4053.8	4066.6	4182.3	4210.1	4447.8	4784.0	5240.1	5766.9	6163.1
17.5°	4312.9	4297.9	4182.3	4122.3	4203.7	4216.5	4424.2	4741.2	5212.3	5826.9	6283.0
20°	4653.4	4632.0	4432.8	4300.0	4347.2	4357.9	4501.3	4773.3	5240.1	5925.4	6469.3
22.5°	5077.4	5068.8	4766.9	4606.3	4604.1	4679.1	4888.9	5323.7	6060.3	6664.2	6664.2
25°	5670.6	5625.6	5231.6	5023.9	4966.0	4961.8	4953.2	5079.5	5430.7	6203.8	6895.5
27.5°	6278.8	6201.7	5850.5	5531.4	5407.2	5392.2	5336.5	5349.4	5567.8	6366.6	7158.9
30°	6824.8	6775.6	6445.8	6092.4	5944.7	5910.4	5756.2	5685.6	5796.9	6659.9	7578.6
32.5°	7242.4	7212.4	6955.5	6634.2	6415.8	6409.4	6184.5	6126.7	6154.5	7015.4	8058.3
35°	7580.8	7591.5	7460.8	7182.4	6931.9	6895.5	6745.6	6672.8	6591.4	7529.4	8662.2
37.5°	8043.3	8066.9	8058.3	7818.5	7512.2	7520.8	7486.5	7366.6	7150.3	8103.3	9332.5
40°	8553.0	8570.1	8568.0	8475.9	8315.3	8323.8	8311.0	8173.9	7850.6	8833.5	10077.7
42.5°	9257.5	9176.1	8964.1	9056.2	9150.4	9191.1	9278.9	9148.3	8705.0	9613.0	10778.0
45°	10045.6	9891.4	9411.7	9454.5	9803.6	9880.7	10364.6	10184.8	9632.3	10508.1	11602.4
47.5°	10542.4	10390.3	9985.6	9977.0	10439.6	10514.6	11371.1	11304.7	10476.0	11473.9	12608.9
50°	10985.7	10964.3	10508.1	10617.3	11069.2	11180.5	12467.6	12405.5	11317.6	12613.2	13705.3
52.5°	11643.1	11469.6	11105.6	11330.4	11927.9	12073.5	13555.4	13373.4	12090.7	13619.7	14769.6
55°	11938.6	11897.9	11876.5	12071.4	12891.6	12996.5	14613.3	14195.7	12750.2	14472.0	15579.1
57.5°	12728.8	12653.9	12865.9	12998.6	14026.5	14187.1	15718.3	15054.4	13328.4	15148.7	15973.1
60°	13752.4	13711.7	13906.6	14146.5	15294.3	15538.4	16977.5	15786.8	13793.1	15489.2	15756.8
62.5°	15281.4	15277.2	15240.7	15754.7	17091.0	17315.8	18422.9	16499.9	13865.9	15234.3	14639.0
65°	17474.3	17397.2	17080.3	17641.3	19326.6	19590.0	19928.4	16898.2	13426.9	13925.9	12326.2
67.5°	19767.8	19763.5	19506.5	20234.6	22536.7	22808.7	21810.7	16810.4	12208.4	11281.2	8754.3
70°	21669.4	21577.3	21905.0	23845.1	26637.6	26952.4	23457.5	15776.1	9724.4	7450.1	5201.6
72.5°	22125.5	22129.8	22810.8	26629.0	30575.7	30625.0	24050.7	12786.6	6507.9	4109.5	2601.9
74°	20720.7	20757.1	21812.9	26768.2	31310.2	31087.5	22534.5	10049.9	4400.7	2683.2	1875.9
75°	18913.3	18684.2	20211.1	25841.0	30547.9	30308.0	20759.3	8064.7	3357.8	2143.6	1642.5
77.5°	10112.0	10345.4	12701.0	19283.8	24817.3	24541.1	14075.8	3867.5	1813.8	1492.6	1182.1
80°	3599.8	3970.3	5580.6	10090.5	15911.0	15996.7	6717.7	1773.1	1276.3	1100.7	835.2
82.5°	1469.0	1509.7	2396.3	4477.8	8079.7	8156.8	2743.2	1053.6	912.3	758.1	499.0
85°	573.9	591.0	1060.0	2013.0	3447.7	3672.6	948.7	556.8	561.1	434.7	254.8
87.5°	192.7	218.4	434.7	670.3	1171.4	1147.8	276.2	164.9	201.3	188.4	79.2
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°	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9	5901.9
2.5°	5921.1	5961.8	5989.7	6019.6	6047.5	6056.0	6049.6	6068.9	6071.0	6073.2	6075.3
5°	5955.4	6011.1	6064.6	6094.6	6107.4	6096.7	6060.3	6041.0	6023.9	6011.1	6015.4
7.5°	6002.5	6081.7	6131.0	6143.8	6109.6	6060.3	5970.4	5899.7	5854.7	5824.8	5822.6
10°	6075.3	6152.4	6193.1	6156.7	6062.5	5942.5	5801.2	5668.4	5567.8	5537.8	5535.7
12.5°	6167.4	6255.2	6253.1	6146.0	5981.1	5766.9	5537.8	5383.6	5246.6	5178.0	5205.9
15°	6287.3	6353.7	6291.6	6098.9	5837.6	5544.2	5261.6	5051.7	4897.5	4824.7	4829.0
17.5°	6426.5	6484.3	6319.4	6015.4	5636.3	5259.4	4931.8	4732.6	4610.6	4557.0	4552.7
20°	6600.0	6617.1	6319.4	5869.7	5377.2	4927.5	4614.8	4475.6	4407.1	4379.3	4387.8
22.5°	6786.3	6752.0	6285.2	5664.2	5036.7	4580.6	4370.7	4308.6	4274.3	4270.1	4274.3
25°	6996.1	6899.8	6214.5	5385.8	4681.2	4280.8	4158.7	4169.4	4175.8	4175.8	4190.8
27.5°	7253.1	7060.4	6096.7	5034.6	4265.8	4002.4	3968.1	4043.1	4077.3	4083.8	4094.5
30°	7591.5	7236.0	5901.9	4595.6	3912.4	3751.8	3811.8	3912.4	3951.0	3974.5	3970.3
32.5°	7994.1	7428.7	5638.5	4156.6	3627.6	3576.2	3649.0	3751.8	3794.7	3807.5	3790.4
35°	8467.3	7647.1	5291.5	3745.4	3379.2	3409.2	3494.9	3527.0	3565.5	3565.5	3574.1
37.5°	8977.0	7822.7	4867.5	3368.5	3186.5	3295.7	3357.8	3327.8	3310.7	3289.3	3300.0
40°	9495.2	7953.4	4317.2	2995.9	2993.8	3177.9	3195.1	3109.4	3040.9	3019.5	3008.7
42.5°	9947.1	8034.7	3820.4	2706.8	2811.7	3062.3	3075.1	2938.1	2828.9	2764.6	2743.2
45°	10480.3	8129.0	3334.2	2467.0	2642.6	2970.2	3002.3	2818.2	2657.5	2522.6	2488.4
47.5°	11210.5	8343.1	2950.9	2280.7	2520.5	2912.4	2957.4	2719.6	2507.6	2332.0	2304.2
50°	12035.0	8636.5	2653.3	2154.3	2426.3	2861.0	2916.7	2619.0	2368.5	2173.6	2152.2
52.5°	12790.9	8795.0	2396.3	2040.8	2334.2	2766.8	2863.1	2546.2	2231.4	2015.1	1995.8
55°	13204.2	8538.0	2143.6	1929.5	2207.8	2644.7	2788.2	2445.5	2098.6	1931.6	1903.8
57.5°	13259.9	8006.9	1914.5	1809.5	2075.1	2494.8	2649.0	2323.5	2013.0	1873.8	1850.2
60°	12829.5	7214.6	1736.7	1711.0	1940.2	2325.6	2492.7	2216.4	1925.2	1809.5	1786.0
62.5°	11758.7	6353.7	1612.5	1621.1	1803.1	2147.9	2377.0	2113.6	1841.7	1738.9	1717.4
65°	9917.1	5244.4	1492.6	1529.0	1681.0	2008.7	2272.1	2028.0	1758.1	1685.3	1666.1
67.5°	6889.1	3786.1	1394.1	1432.6	1565.4	1867.4	2150.0	1935.9	1663.9	1625.4	1595.4
70°	3813.9	2329.9	1278.4	1323.4	1445.5	1708.9	2013.0	1796.7	1526.9	1509.7	1466.9
72.5°	2004.4	1484.0	1147.8	1197.1	1282.7	1505.4	1803.1	1644.6	1391.9	1319.1	1263.5
74°	1565.4	1216.3	1060.0	1111.4	1169.2	1385.5	1678.9	1535.4	1295.6	1209.9	1167.1
75°	1364.1	1083.6	985.1	1051.5	1102.9	1304.1	1582.5	1458.3	1242.0	1160.7	1122.1
77.5°	963.7	811.6	805.2	884.4	912.3	1143.5	1426.2	1327.7	1107.1	1021.5	985.1
80°	676.7	608.2	638.2	687.4	726.0	1010.8	1323.4	1147.8	908.0	807.3	794.5
82.5°	441.1	398.3	456.1	501.1	513.9	745.2	1068.6	871.6	661.7	537.5	499.0
85°	203.4	199.2	261.3	254.8	252.7	364.0	633.9	509.7	381.2	284.8	267.7
87.5°	51.4	49.3	64.2	53.5	64.2	55.7	57.8	15.0	2.1	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)