

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: P459090

Luminaire Tested: **GALN-SA5D-735-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459090
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-735-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 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: 36009 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

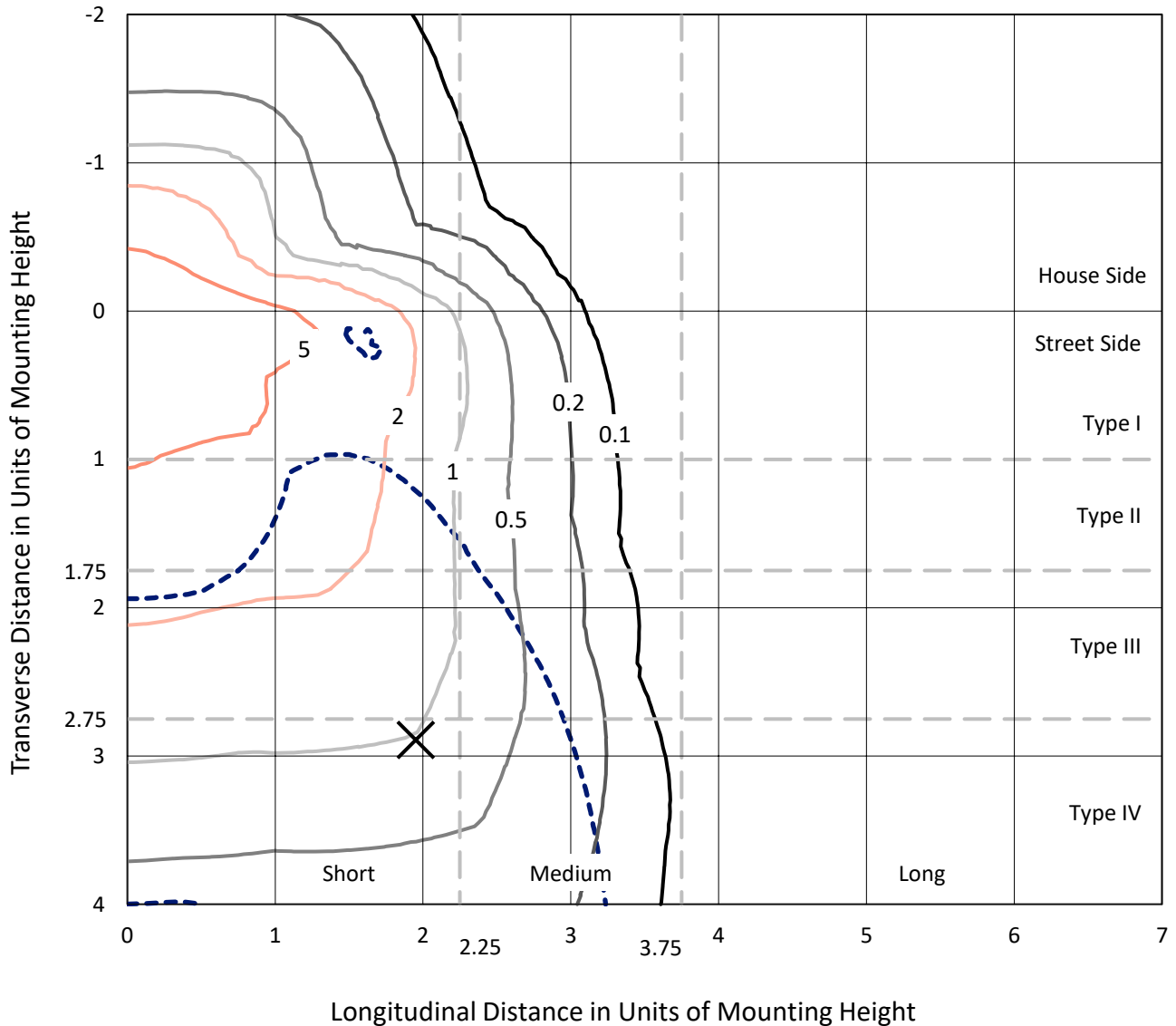
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

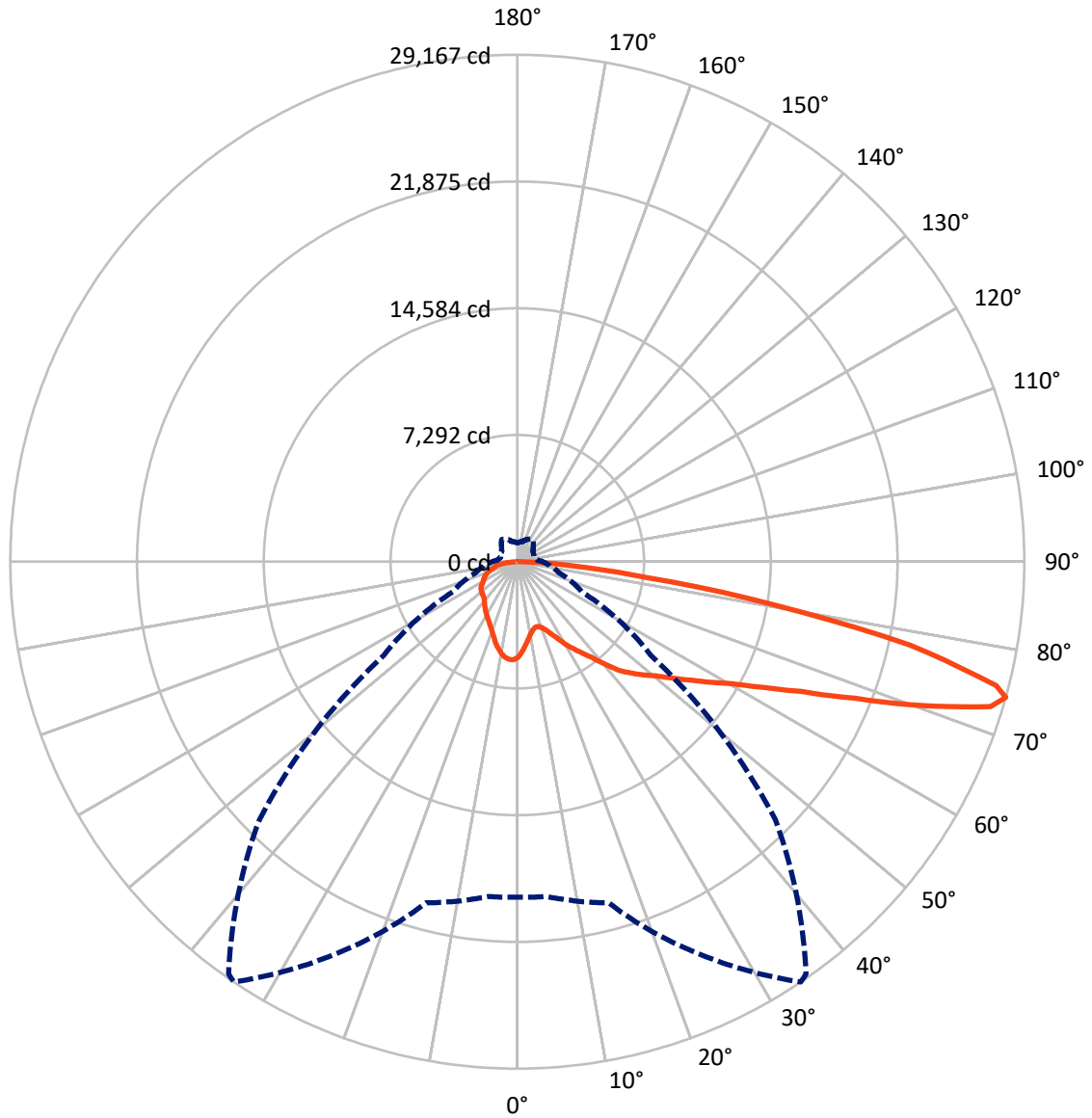
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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	7663.0	0.0	7663.0
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	28346.0	0.0	28346.0
	% Fixture	78.7	0.0	78.7
Total	Lumens	36009.0	0.0	36009.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.0	1.4
10°-20°	1368.7	3.8
20°-30°	2256.7	6.3
30°-40°	3380.3	9.4
40°-50°	4914.0	13.6
50°-60°	6863.7	19.1
60°-70°	8593.0	23.9
70°-80°	7105.7	19.7
80°-90°	1026.7	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°	36009.0	100.0
0°-180°	36009.0	100.0

Coefficient of Utilization



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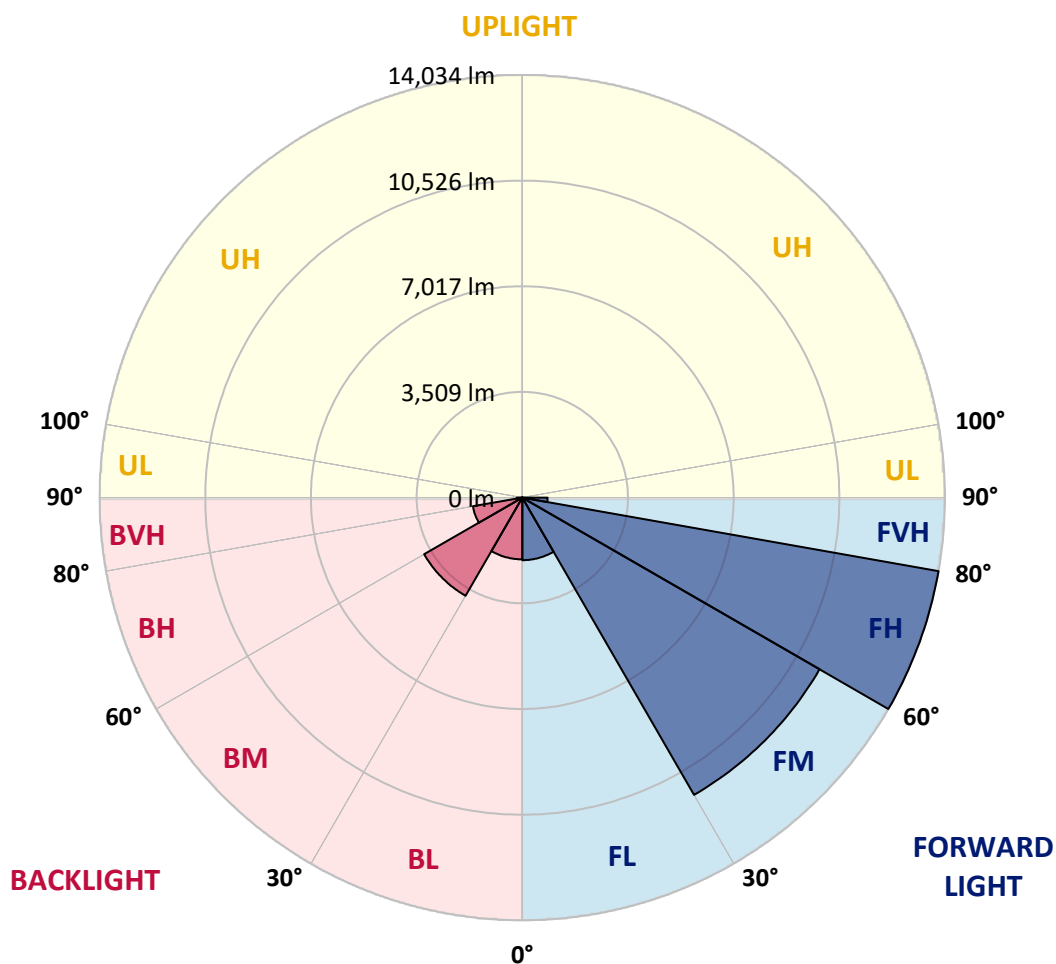
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2075.8	5.8			
FM (30°-60°)	11394.7	31.6			
FH (60°-80°)	14034.4	39.0			G5
FVH (80°-90°)	841.1	2.3			G5
BL (0°-30°)	2049.7	5.7	B3/2500		
BM (30°-60°)	3763.3	10.5	B3/5000		
BH (60°-80°)	1664.4	4.6	B3/2500		G3/2500
BVH (80°-90°)	185.6	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°	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9
2.5°	5080.9	5106.9	5120.8	5170.7	5182.7	5198.6	5240.5	5296.4	5368.2	5432.0	5487.9
5°	4658.0	4697.9	4721.9	4765.7	4851.5	4859.5	4971.2	5098.9	5244.5	5380.2	5491.9
7.5°	4257.1	4300.9	4320.9	4400.7	4514.4	4532.3	4695.9	4897.4	5140.8	5346.3	5517.8
10°	3955.8	3977.8	4021.7	4081.5	4217.2	4229.1	4442.6	4711.9	5027.1	5330.3	5561.7
12.5°	3792.2	3804.2	3814.2	3878.0	4011.7	4029.6	4253.1	4558.3	4937.3	5342.3	5633.5
15°	3816.2	3820.2	3776.3	3788.3	3896.0	3921.9	4143.3	4456.5	4881.4	5372.2	5741.2
17.5°	4017.7	4003.7	3896.0	3840.1	3915.9	3927.9	4121.4	4416.6	4855.5	5428.0	5852.9
20°	4334.9	4314.9	4129.4	4005.7	4049.6	4059.6	4193.2	4446.6	4881.4	5519.8	6026.5
22.5°	4729.8	4721.9	4440.6	4291.0	4289.0	4289.0	4358.8	4554.3	4959.2	5645.5	6208.0
25°	5282.4	5240.5	4873.5	4680.0	4626.1	4622.1	4614.1	4731.8	5059.0	5779.1	6423.5
27.5°	5849.0	5777.1	5450.0	5152.7	5037.0	5023.1	4971.2	4983.2	5186.7	5930.7	6668.9
30°	6357.7	6311.8	6004.6	5675.4	5537.8	5505.8	5362.2	5296.4	5400.1	6204.0	7059.8
32.5°	6746.7	6718.7	6479.3	6180.1	5976.6	5970.6	5761.2	5707.3	5733.3	6535.2	7506.7
35°	7061.8	7071.8	6950.1	6690.8	6457.4	6423.5	6283.8	6216.0	6140.2	7014.0	8069.2
37.5°	7492.7	7514.7	7506.7	7283.3	6998.0	7006.0	6974.1	6862.4	6660.9	7548.6	8693.6
40°	7967.5	7983.5	7981.5	7895.7	7746.1	7754.1	7742.1	7614.4	7313.2	8228.8	9387.9
42.5°	8623.8	8548.0	8350.5	8436.3	8524.1	8562.0	8643.8	8522.1	8109.1	8955.0	10040.2
45°	9357.9	9214.3	8767.5	8807.4	9132.5	9204.3	9655.2	9487.6	8972.9	9788.8	10808.2
47.5°	9820.7	9679.1	9302.1	9294.1	9725.0	9794.8	10592.8	10530.9	9758.9	10688.5	11745.8
50°	10233.7	10213.7	9788.8	9890.6	10311.5	10415.2	11614.1	11556.3	10542.9	11749.8	12767.2
52.5°	10846.1	10684.5	10345.4	10554.9	11111.4	11247.1	12627.5	12458.0	11263.0	12687.4	13758.6
55°	11121.4	11083.5	11063.5	11245.1	12009.1	12106.9	13613.0	13224.0	11877.5	13481.3	14512.7
57.5°	11857.5	11787.7	11985.2	12108.9	13066.4	13216.0	14642.3	14023.9	12416.1	14111.7	14879.7
60°	12811.1	12773.2	12954.7	13178.1	14247.4	14474.8	15815.3	14706.2	12849.0	14428.9	14678.3
62.5°	14235.4	14231.4	14197.5	14676.3	15921.1	16130.5	17161.9	15370.5	12916.8	14191.5	13636.9
65°	16278.1	16206.3	15911.1	16433.7	18003.7	18249.1	18564.3	15741.5	12507.8	12972.6	11482.5
67.5°	18414.6	18410.7	18171.3	18849.5	20994.0	21247.4	20317.8	15659.7	11372.8	10509.0	8155.0
70°	20186.1	20100.3	20405.5	22212.9	24814.2	25107.4	21851.8	14696.2	9058.7	6940.2	4845.5
72.5°	20611.0	20615.0	21249.4	24806.2	28482.8	28528.6	22404.4	11911.4	6062.4	3828.2	2423.8
74°	19302.4	19336.3	20319.7	24935.9	29167.0	28959.5	20992.0	9361.9	4099.5	2499.6	1747.5
75°	17618.7	17405.2	18827.6	24072.1	28456.8	28233.4	19338.3	7512.7	3128.0	1996.9	1530.1
77.5°	9419.8	9637.2	11831.6	17963.8	23118.6	22861.2	13112.3	3602.7	1689.7	1390.4	1101.2
80°	3353.4	3698.5	5198.6	9399.8	14821.9	14901.7	6257.9	1651.8	1188.9	1025.4	778.0
82.5°	1368.5	1406.4	2232.3	4171.3	7526.6	7598.5	2555.4	981.5	849.8	706.2	464.8
85°	534.6	550.6	987.5	1875.2	3211.7	3421.2	883.7	518.7	522.7	405.0	237.4
87.5°	179.5	203.5	405.0	624.4	1091.2	1069.3	257.3	153.6	187.5	175.5	73.8
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°	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9	5497.9
2.5°	5515.8	5553.7	5579.7	5607.6	5633.5	5641.5	5635.5	5653.5	5655.5	5657.5	5659.4
5°	5547.7	5599.6	5649.5	5677.4	5689.4	5679.4	5645.5	5627.5	5611.6	5599.6	5603.6
7.5°	5591.6	5665.4	5711.3	5723.3	5691.4	5645.5	5561.7	5495.9	5454.0	5426.0	5424.1
10°	5659.4	5731.3	5769.2	5735.3	5647.5	5535.8	5404.1	5280.4	5186.7	5158.7	5156.7
12.5°	5745.2	5827.0	5825.0	5725.3	5571.7	5372.2	5158.7	5015.1	4887.4	4823.6	4849.5
15°	5856.9	5918.8	5860.9	5681.4	5438.0	5164.7	4901.4	4705.9	4562.3	4494.4	4498.4
17.5°	5986.6	6040.5	5886.9	5603.6	5250.5	4899.4	4594.2	4408.7	4295.0	4245.1	4241.1
20°	6148.2	6164.1	5886.9	5467.9	5009.1	4590.2	4298.9	4169.3	4105.4	4079.5	4087.5
22.5°	6321.7	6289.8	5854.9	5276.4	4691.9	4267.0	4071.5	4013.7	3981.8	3977.8	3981.8
25°	6517.2	6427.5	5789.1	5017.1	4360.8	3987.7	3874.0	3884.0	3890.0	3890.0	3904.0
27.5°	6756.6	6577.1	5679.4	4689.9	3973.8	3728.4	3696.5	3766.3	3798.2	3804.2	3814.2
30°	7071.8	6740.7	5497.9	4281.0	3644.6	3495.0	3550.9	3644.6	3680.5	3702.5	3698.5
32.5°	7446.9	6920.2	5252.5	3872.0	3379.3	3331.4	3399.3	3495.0	3534.9	3546.9	3530.9
35°	7887.7	7123.7	4929.3	3489.0	3147.9	3175.8	3255.6	3285.6	3321.5	3321.5	3329.4
37.5°	8362.5	7287.3	4534.3	3137.9	2968.4	3070.1	3128.0	3100.0	3084.1	3064.1	3074.1
40°	8845.3	7408.9	4021.7	2790.8	2788.8	2960.4	2976.3	2896.6	2832.7	2812.8	2802.8
42.5°	9266.2	7484.8	3558.8	2521.5	2619.3	2852.7	2864.6	2737.0	2635.2	2575.4	2555.4
45°	9762.9	7572.5	3106.0	2298.1	2461.7	2766.9	2796.8	2625.2	2475.6	2350.0	2318.0
47.5°	10443.1	7772.0	2748.9	2124.5	2348.0	2713.0	2754.9	2533.5	2336.0	2172.4	2146.5
50°	11211.2	8045.3	2471.6	2006.8	2260.2	2665.1	2717.0	2439.7	2206.3	2024.8	2004.8
52.5°	11915.4	8192.9	2232.3	1901.1	2174.4	2577.4	2667.1	2371.9	2078.7	1877.2	1859.2
55°	12300.4	7953.5	1996.9	1797.4	2056.7	2463.7	2597.3	2278.1	1955.0	1799.4	1773.4
57.5°	12352.2	7458.8	1783.4	1685.7	1933.0	2324.0	2467.7	2164.4	1875.2	1745.5	1723.6
60°	11951.3	6720.7	1617.8	1593.9	1807.4	2166.4	2322.0	2064.7	1793.4	1685.7	1663.7
62.5°	10953.8	5918.8	1502.1	1510.1	1679.7	2000.9	2214.3	1968.9	1715.6	1619.8	1599.9
65°	9238.2	4885.4	1390.4	1424.3	1566.0	1871.2	2116.6	1889.1	1637.8	1570.0	1552.0
67.5°	6417.5	3526.9	1298.7	1334.6	1458.3	1739.5	2002.8	1803.4	1550.0	1514.1	1486.2
70°	3552.9	2170.4	1190.9	1232.8	1346.5	1591.9	1875.2	1673.7	1422.3	1406.4	1366.5
72.5°	1867.2	1382.4	1069.3	1115.1	1194.9	1402.4	1679.7	1532.1	1296.7	1228.8	1177.0
74°	1458.3	1133.1	987.5	1035.3	1089.2	1290.7	1564.0	1430.3	1206.9	1127.1	1087.2
75°	1270.7	1009.4	917.6	979.5	1027.4	1214.9	1474.2	1358.5	1157.0	1081.2	1045.3
77.5°	897.7	756.1	750.1	823.9	849.8	1065.3	1328.6	1236.8	1031.3	951.6	917.6
80°	630.4	566.5	594.5	640.4	676.3	941.6	1232.8	1069.3	845.8	752.1	740.1
82.5°	410.9	371.0	424.9	466.8	478.8	694.2	995.4	811.9	616.4	500.7	464.8
85°	189.5	185.5	243.4	237.4	235.4	339.1	590.5	474.8	355.1	265.3	249.4
87.5°	47.9	45.9	59.8	49.9	59.8	51.9	53.9	14.0	2.0	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)