

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: P191557

Luminaire Tested: **GLEON-AF-09-LED-E1-T4W-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-T4W-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35615 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

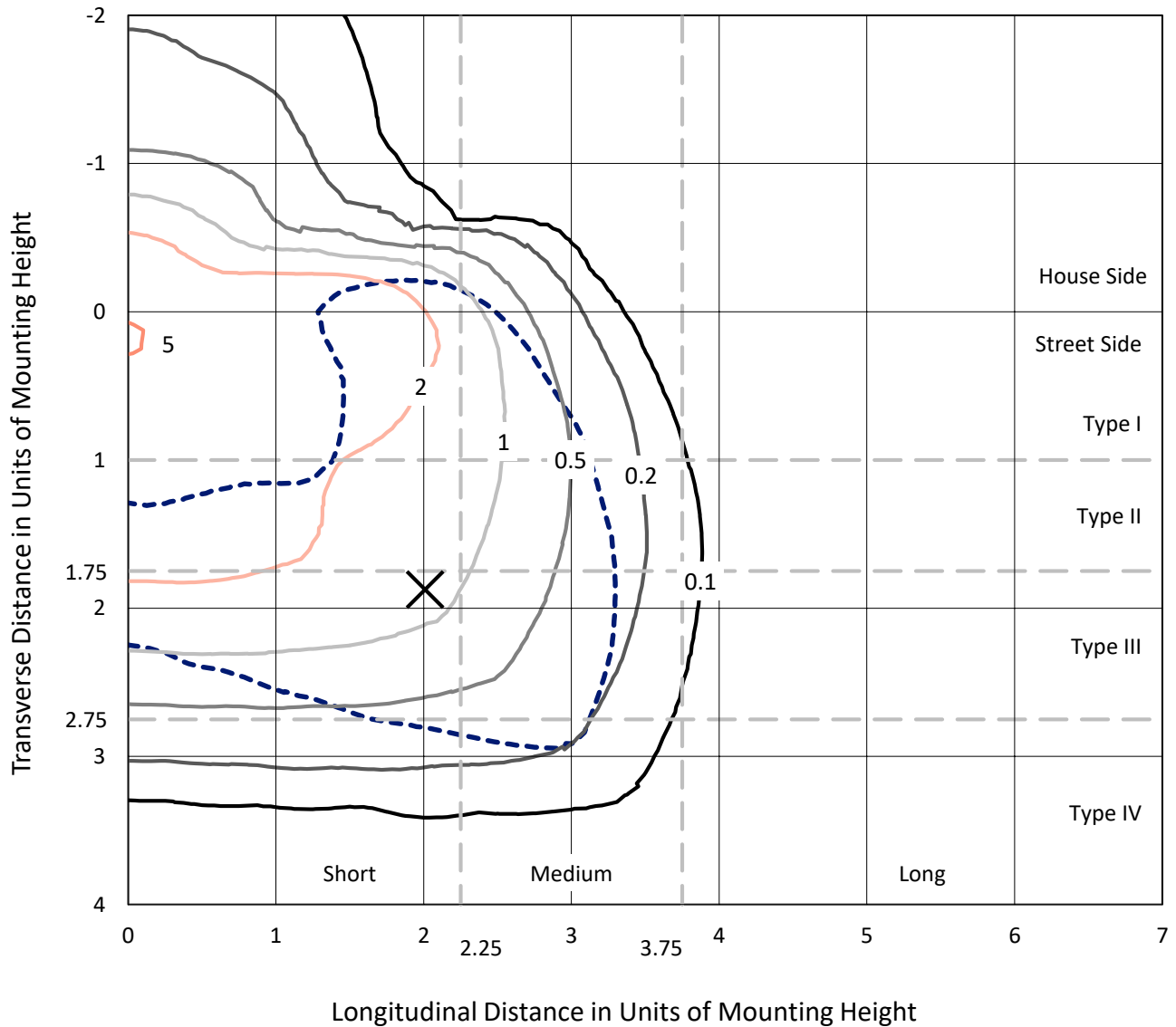
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

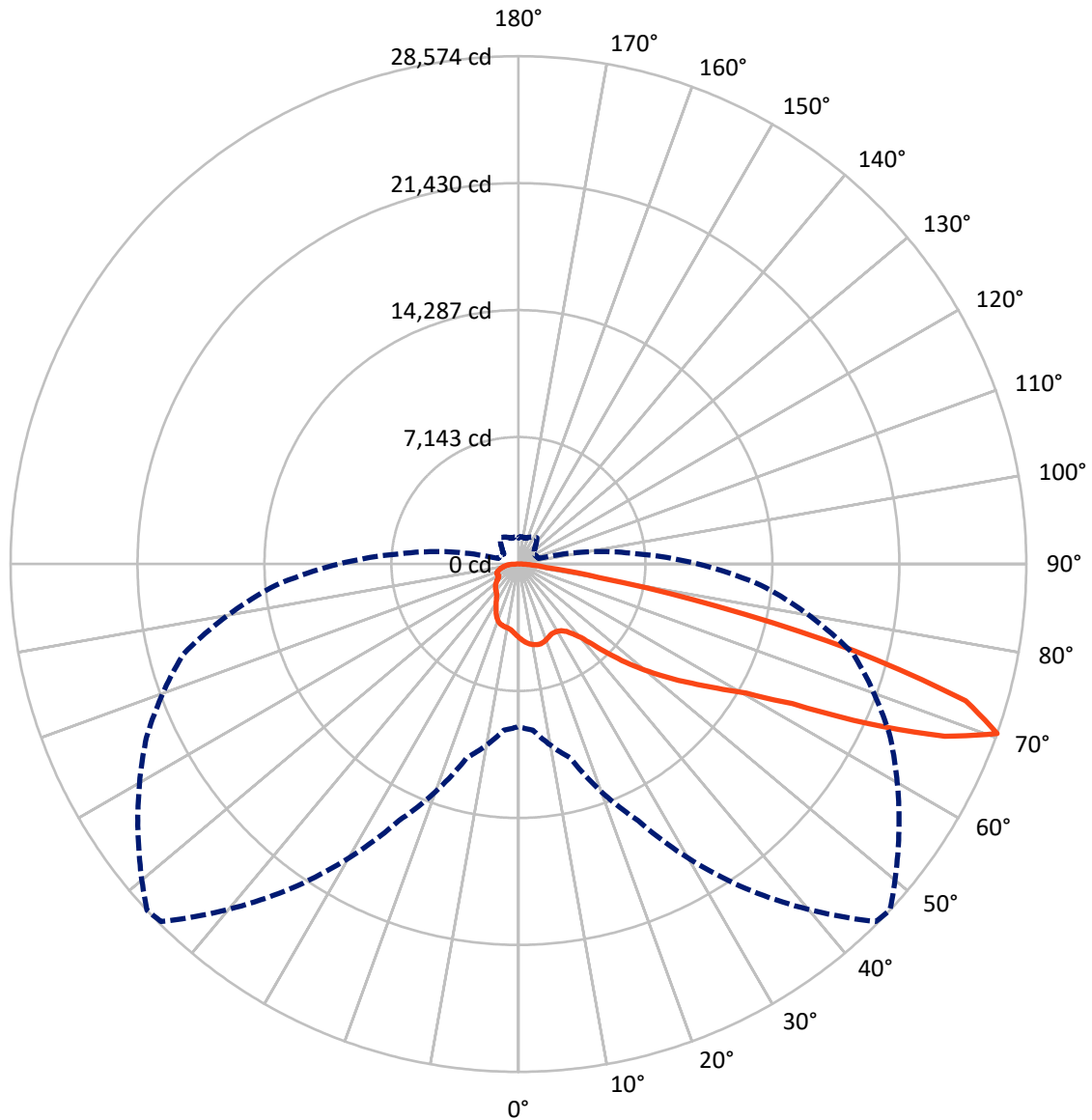
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7430.0	0.0	7430.0
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	28185.0	0.0	28185.0
	% Fixture	79.1	0.0	79.1
Total	Lumens	35615.0	0.0	35615.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.0	1.1
10°-20°	1161.6	3.3
20°-30°	1715.4	4.8
30°-40°	2493.3	7.0
40°-50°	4487.1	12.6
50°-60°	7773.5	21.8
60°-70°	11095.0	31.2
70°-80°	5695.6	16.0
80°-90°	797.4	2.2
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°	35615.0	100.0
0°-180°	35615.0	100.0

Coefficient of Utilization



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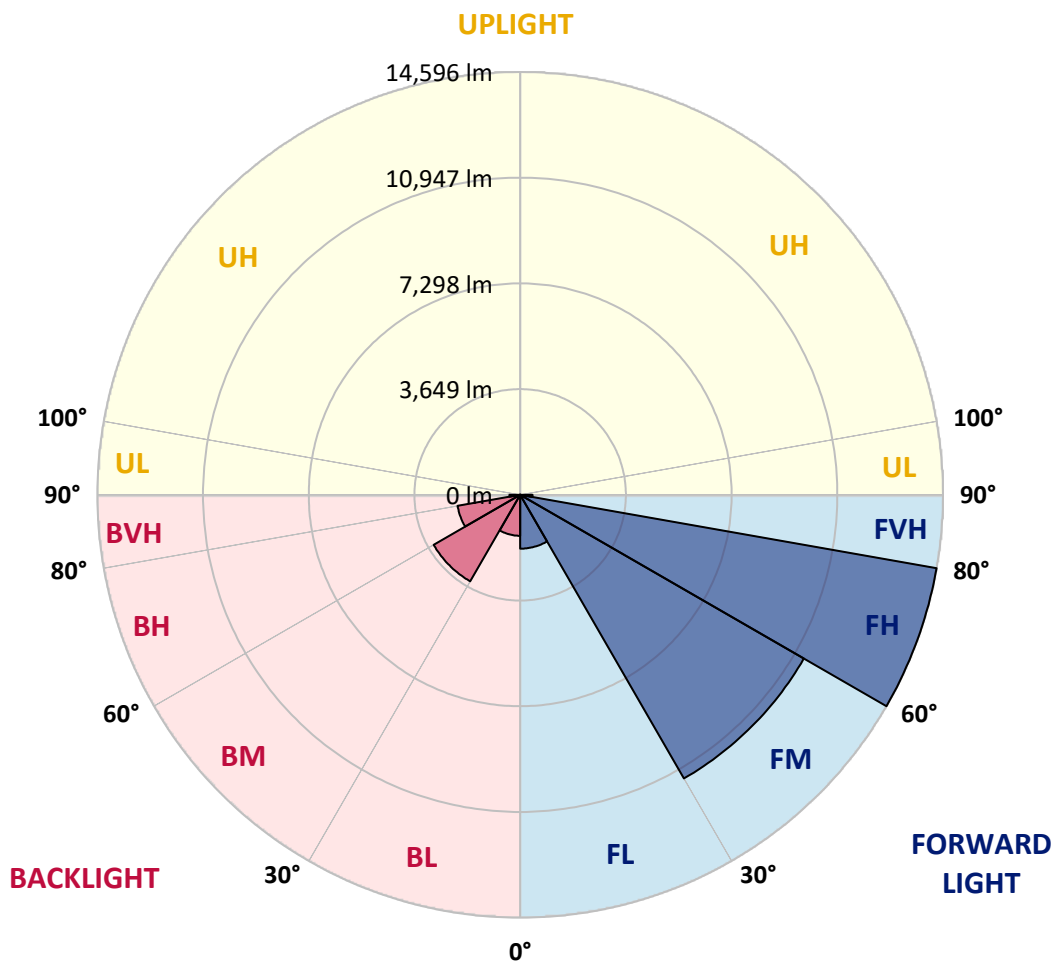
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1858.3	5.2			
FM	(30°-60°)	11305.2	31.7			
FH	(60°-80°)	14596.0	41.0			G5
FVH	(80°-90°)	425.5	1.2			G3/500
BL	(0°-30°)	1414.7	4.0	B3/2500		
BM	(30°-60°)	3448.8	9.7	B3/5000		
BH	(60°-80°)	2194.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	371.9	1.0			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4
2.5°	4375.1	4366.4	4362.9	4355.9	4347.3	4304.0	4295.4	4264.2	4220.8	4175.8	4129.0
5°	4662.6	4661.0	4641.8	4607.2	4551.7	4456.5	4434.0	4357.7	4255.5	4156.8	4057.9
7.5°	4915.6	4900.0	4863.6	4794.4	4697.3	4567.4	4536.2	4430.5	4290.2	4155.0	4021.5
10°	5101.0	5092.4	5012.7	4917.3	4790.9	4647.1	4610.6	4492.9	4338.6	4167.1	4000.8
12.5°	5206.7	5189.4	5097.6	4983.2	4832.4	4692.1	4655.8	4536.2	4362.9	4167.1	3971.3
15°	5199.8	5187.7	5095.8	4971.0	4818.6	4695.5	4662.6	4543.1	4357.7	4149.8	3933.2
17.5°	5061.2	5066.4	4988.4	4865.4	4740.7	4647.1	4617.6	4506.7	4323.1	4115.1	3888.1
20°	4818.6	4842.9	4790.9	4681.7	4612.4	4548.3	4529.2	4435.7	4269.4	4064.9	3839.6
22.5°	4576.1	4598.6	4577.7	4485.9	4475.5	4437.5	4427.0	4359.4	4222.5	4033.7	3810.2
25°	4397.6	4418.3	4414.9	4335.2	4366.4	4364.6	4355.9	4323.1	4212.2	4033.7	3815.4
27.5°	4349.1	4355.9	4349.1	4276.2	4319.6	4354.2	4347.3	4342.1	4243.3	4083.9	3881.2
30°	4515.4	4505.0	4451.3	4304.0	4343.9	4392.3	4385.4	4388.9	4336.9	4215.6	4028.5
32.5°	5179.0	5132.2	4962.4	4548.3	4442.6	4468.6	4472.0	4529.2	4537.9	4418.3	4257.2
35°	6171.9	6119.8	5899.8	5203.2	4749.3	4659.2	4659.2	4745.8	4797.8	4709.5	4612.4
37.5°	7223.6	7166.4	7048.5	6111.2	5393.8	4990.2	4981.5	5042.1	5116.6	5137.5	5161.7
40°	8419.1	8358.4	8391.4	7130.0	6293.1	5563.6	5440.7	5397.3	5598.3	5731.7	5925.7
42.5°	9727.3	9699.6	9711.7	8264.9	7317.2	6421.4	6246.3	6022.8	6265.4	6502.8	6909.9
45°	10938.4	10962.7	10950.6	9479.5	8457.2	7467.8	7282.5	6849.3	7086.7	7493.8	8157.5
47.5°	11998.8	11898.4	12054.2	10806.8	9734.2	8639.1	8410.5	7830.0	8070.9	8573.4	9696.1
50°	13286.2	13272.4	13043.6	12577.6	11278.0	9815.6	9515.9	8843.6	9217.9	9916.2	11634.9
52.5°	14639.4	14388.2	14178.6	13955.1	12915.5	11021.6	10654.2	9853.8	10566.0	11444.4	13998.4
55°	14916.7	14804.0	15064.0	15440.0	14493.9	12274.4	11846.4	11120.4	12083.7	13191.0	16723.9
57.5°	15509.3	15507.5	16044.7	16715.2	16119.1	13603.3	13171.9	12650.3	13790.4	15192.1	19617.4
60°	15909.5	16022.2	17020.2	18321.5	17715.0	15138.4	14741.6	14415.9	15731.0	17429.0	22313.5
62.5°	16119.1	16271.7	17633.5	18972.9	19971.0	17694.2	17297.4	16827.8	18298.9	19882.6	23890.3
65°	15247.6	15547.4	17538.3	19536.0	21946.2	21837.0	21658.5	20833.8	21509.6	21821.5	23320.2
67.5°	12835.8	13142.5	15460.8	19011.0	23356.6	25832.6	25870.7	24462.0	23484.8	21987.8	19607.1
70°	9145.1	9386.0	11304.0	15939.0	22282.3	28443.8	28573.7	26134.1	23091.5	19499.7	13698.6
72.5°	4342.1	4489.4	6305.3	10373.5	17682.0	26061.3	26312.5	23999.4	19634.8	14436.7	7473.1
75°	1595.8	1640.8	2131.2	4413.1	10255.8	19219.0	19515.2	17203.9	13015.9	7187.2	2846.8
77.5°	956.5	985.9	1195.5	1862.6	4033.7	10985.3	11423.6	9356.5	5688.4	2675.2	1400.0
80°	668.8	689.6	857.6	1159.2	1906.0	4186.1	4576.1	3818.9	2266.3	1692.9	1018.9
82.5°	452.2	462.6	602.9	783.2	1266.6	1495.3	1613.1	1698.0	1528.2	1259.7	646.3
85°	296.2	306.7	408.9	516.4	805.7	772.7	790.1	999.7	1115.8	855.9	358.6
87.5°	169.8	176.8	246.0	275.5	395.1	327.4	330.9	526.7	713.9	576.9	218.3
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°	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4	4132.4
2.5°	4116.9	4094.4	4044.1	4012.9	3983.5	3976.5	3964.3	3962.6	3961.0	3961.0	3955.8
5°	4025.0	3987.0	3908.9	3865.6	3829.2	3825.7	3824.0	3832.7	3836.2	3839.6	3834.4
7.5°	3966.1	3914.1	3817.1	3754.7	3711.4	3701.0	3718.3	3758.2	3784.2	3794.5	3789.4
10°	3929.8	3865.6	3753.0	3685.4	3649.1	3643.9	3666.4	3713.1	3766.8	3787.7	3785.9
12.5°	3888.1	3815.4	3695.8	3624.8	3604.0	3614.4	3643.9	3687.1	3742.6	3775.5	3777.2
15°	3846.6	3761.7	3638.6	3576.2	3567.6	3581.5	3609.2	3642.1	3685.4	3718.3	3721.8
17.5°	3796.3	3708.0	3584.9	3520.8	3513.8	3520.8	3522.5	3539.9	3567.6	3598.7	3607.4
20°	3742.6	3652.5	3524.3	3460.1	3429.0	3401.3	3370.1	3373.6	3382.2	3413.4	3420.3
22.5°	3704.5	3614.4	3477.5	3389.1	3306.0	3222.8	3160.4	3151.7	3155.2	3181.2	3189.9
25°	3708.0	3612.7	3465.3	3312.9	3130.9	2997.6	2914.4	2900.5	2898.7	2917.9	2929.9
27.5°	3775.5	3680.3	3510.5	3234.9	2940.4	2742.8	2654.5	2644.1	2630.2	2635.4	2649.2
30°	3926.3	3837.9	3619.6	3155.2	2734.1	2493.3	2401.5	2391.1	2372.0	2363.4	2373.8
32.5°	4172.3	4099.6	3779.0	3079.0	2528.0	2280.3	2186.7	2164.2	2152.0	2141.6	2150.2
35°	4581.2	4550.0	3992.1	2995.8	2346.0	2115.6	2030.7	1996.1	1978.7	1997.8	2011.6
37.5°	5222.3	5239.7	4271.0	2865.9	2205.7	2006.4	1935.4	1895.5	1869.5	1885.2	1900.7
40°	6130.2	6142.4	4579.4	2682.2	2084.5	1942.4	1866.1	1829.8	1793.3	1765.6	1763.9
42.5°	7322.3	7199.3	4882.7	2482.9	1944.1	1902.5	1817.6	1772.6	1717.1	1640.8	1625.3
45°	8736.2	8304.7	5113.1	2254.2	1786.4	1854.0	1763.9	1701.5	1614.8	1531.7	1523.1
47.5°	10364.9	9491.7	5225.7	2016.8	1639.1	1782.9	1698.0	1599.3	1490.1	1448.5	1443.3
50°	12354.1	10900.4	5279.4	1786.4	1510.9	1689.4	1602.8	1486.7	1394.8	1386.1	1381.0
52.5°	14618.7	12594.9	5296.8	1597.5	1405.2	1568.1	1524.8	1412.2	1339.3	1346.3	1346.3
55°	16989.0	14344.9	5061.2	1460.7	1308.1	1443.3	1472.7	1382.7	1322.1	1349.8	1360.1
57.5°	19165.2	15895.6	4319.6	1355.0	1216.4	1348.0	1453.7	1410.4	1368.8	1481.4	1488.4
60°	20835.6	16812.3	3226.3	1259.7	1148.8	1315.1	1503.9	1516.1	1526.4	1795.1	1831.5
62.5°	21185.5	16507.3	2217.9	1185.2	1117.6	1342.8	1595.8	1597.5	1585.4	1772.6	1795.1
65°	19579.4	14578.8	1613.1	1143.6	1091.6	1393.1	1673.8	1637.4	1557.6	1699.7	1658.2
67.5°	15549.2	10983.5	1342.8	1112.4	1053.4	1389.6	1756.9	1673.8	1542.1	1665.2	1597.5
70°	10092.9	6641.4	1195.5	1086.4	1008.4	1323.8	1805.5	1670.3	1497.1	1549.1	1469.4
72.5°	4924.3	2969.8	1096.8	1048.3	961.7	1231.9	1803.8	1639.1	1450.2	1446.8	1403.5
75°	1926.7	1360.1	1006.7	991.1	881.9	1128.0	1755.2	1594.1	1394.8	1339.3	1323.8
77.5°	1128.0	970.3	892.3	906.2	786.6	1024.0	1684.2	1516.1	1318.6	1252.7	1235.4
80°	821.3	726.0	760.7	783.2	672.3	920.0	1588.8	1420.8	1233.7	1266.6	1242.4
82.5°	526.7	467.8	616.8	639.3	559.7	814.4	1484.9	1320.3	1114.1	1011.9	987.7
85°	268.5	296.2	459.2	486.9	431.5	668.8	1358.4	1186.9	979.0	842.1	855.9
87.5°	150.8	202.7	292.9	327.4	304.9	514.6	1102.0	979.0	798.7	649.8	571.8
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)