

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: P191493

Luminaire Tested: **GLEON-AF-05-LED-E1-T3R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-05-LED-E1-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31116.1 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 279
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

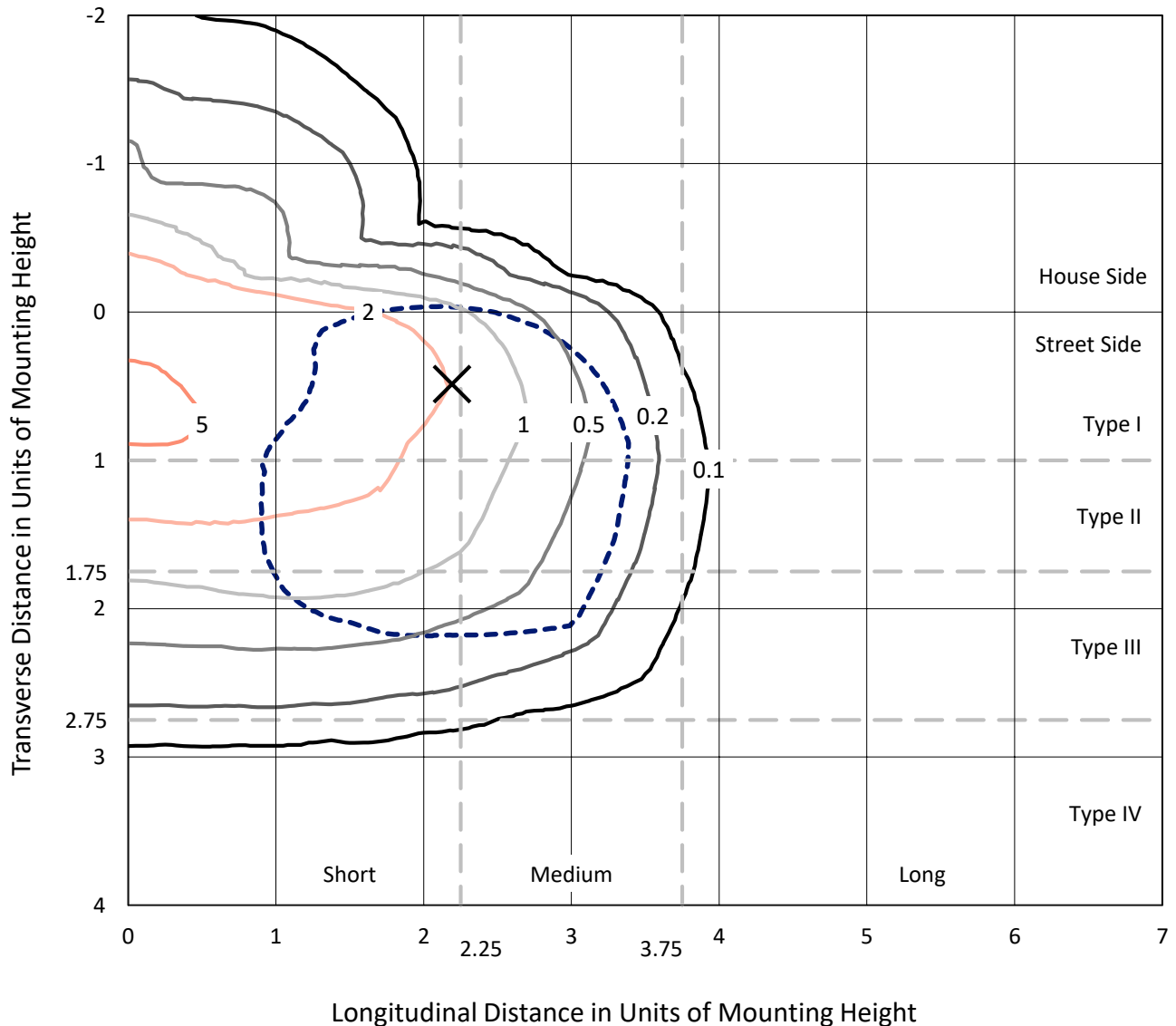


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Iso-Footcandle Lines of Horizontal Illumination

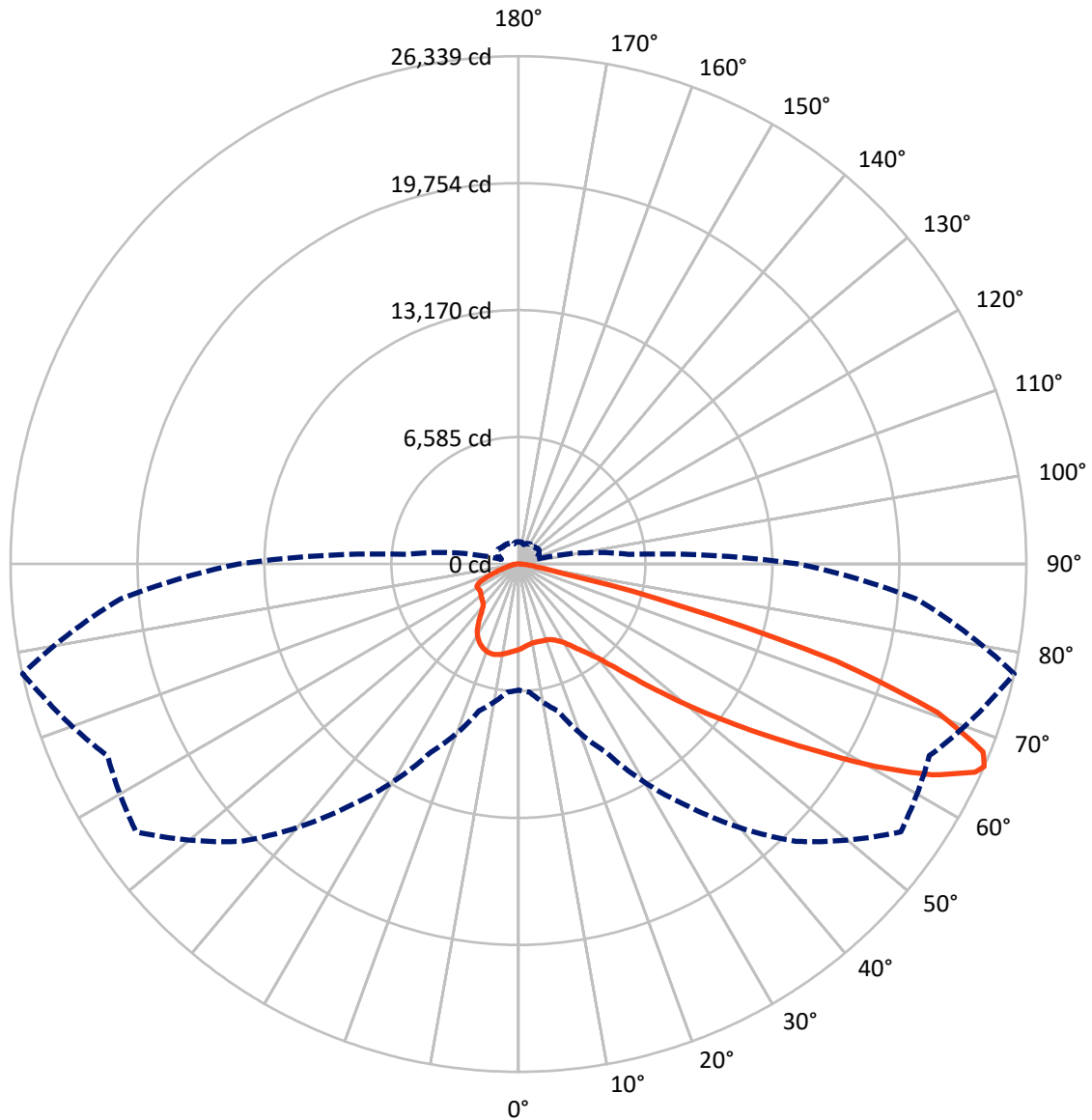
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5316.0	0.0	5316.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	25800.1	0.0	25800.1
	% Fixture	82.9	0.0	82.9
Total	Lumens	31116.1	0.0	31116.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.2	1.3
10°-20°	1117.6	3.6
20°-30°	1907.4	6.1
30°-40°	3053.4	9.8
40°-50°	4717.2	15.2
50°-60°	6690.7	21.5
60°-70°	8950.3	28.8
70°-80°	3886.9	12.5
80°-90°	396.4	1.3
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°	31116.1	100.0
0°-180°	31116.1	100.0



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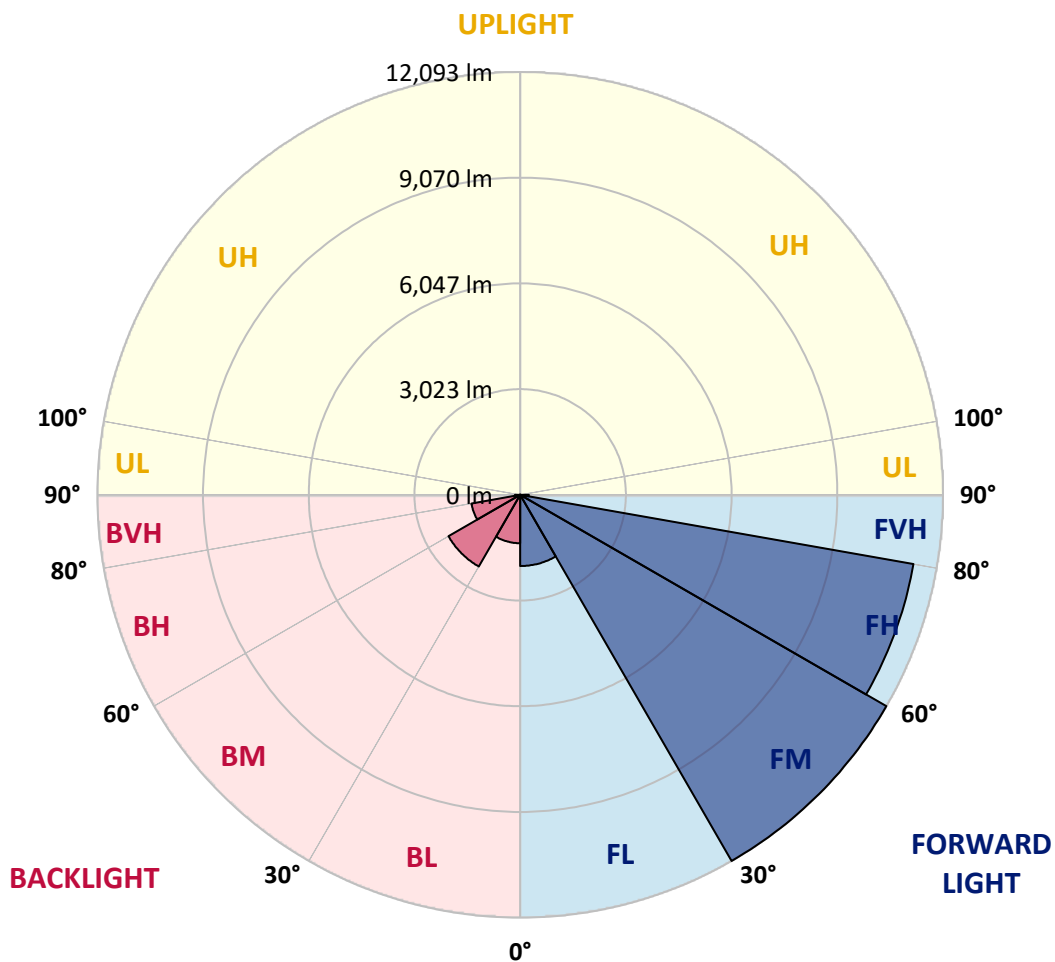
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2036.7	6.5			
FM	(30°-60°)	12093.3	38.9			
FH	(60°-80°)	11421.5	36.7			G4/12000
FVH	(80°-90°)	248.6	0.8			G3/500
BL	(0°-30°)	1384.5	4.4	B3/2500		
BM	(30°-60°)	2368.0	7.6	B2/2500		
BH	(60°-80°)	1415.7	4.5	B3/2500		G3/2500
BVH	(80°-90°)	147.8	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-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2
2.5°	3922.6	3949.0	3971.1	3991.7	4032.8	4100.5	4178.3	4241.6	4332.7	4350.4	4398.9
5°	3562.3	3562.3	3580.0	3610.9	3666.8	3768.1	3874.0	4015.2	4213.6	4260.7	4390.1
7.5°	3387.4	3388.8	3399.2	3425.7	3474.1	3566.7	3682.9	3849.1	4118.1	4196.0	4416.6
10°	3452.0	3437.4	3415.3	3402.1	3409.5	3463.8	3574.1	3759.3	4059.3	4159.2	4475.4
12.5°	3813.8	3785.8	3709.4	3607.9	3510.9	3471.2	3535.9	3716.7	4034.3	4150.4	4553.3
15°	4404.8	4393.1	4250.5	4040.1	3805.0	3607.9	3563.9	3700.5	4037.3	4160.8	4645.9
17.5°	5145.7	5129.6	4941.5	4635.6	4251.9	3868.2	3662.4	3713.8	4047.5	4178.3	4735.5
20°	5894.1	5844.1	5641.3	5276.6	4784.1	4222.4	3825.5	3747.6	4060.8	4197.5	4829.7
22.5°	6452.8	6411.7	6229.4	5875.0	5307.5	4632.6	4044.5	3806.4	4103.4	4253.3	4945.9
25°	6943.9	6946.8	6766.0	6423.4	5836.8	5067.9	4326.9	3963.7	4212.2	4368.0	5104.6
27.5°	7551.1	7515.8	7346.7	7007.1	6360.2	5507.5	4667.9	4179.9	4373.9	4531.3	5313.4
30°	8277.3	8252.3	8056.9	7671.6	6940.9	5979.4	5057.6	4431.2	4582.7	4745.9	5586.8
32.5°	9131.6	9119.8	8916.9	8421.4	7611.4	6535.1	5514.8	4763.6	4894.4	5063.4	5979.4
35°	10134.3	10135.7	9896.0	9300.7	8345.0	7182.0	6033.8	5191.4	5273.7	5450.1	6446.9
37.5°	10751.7	10826.7	10737.0	10129.9	9175.7	7905.4	6707.2	5758.9	5705.9	5883.8	6948.3
40°	10884.1	10975.2	11259.0	10950.2	10104.8	8702.2	7304.1	6304.3	6238.2	6455.7	7593.7
42.5°	10698.8	10825.3	11425.1	11642.7	11091.3	9684.4	8106.8	7114.4	7030.6	7323.2	8396.5
45°	10588.6	10682.7	11376.5	12002.9	11947.0	10794.4	9128.6	8131.8	8101.0	8484.7	9322.7
47.5°	10397.4	10482.7	11150.2	12086.7	12449.8	11811.8	10356.3	9375.7	9435.9	9938.7	10368.0
50°	10500.4	10535.6	10897.3	11873.5	12595.4	12557.1	11727.9	10816.5	11022.3	11650.1	11551.6
52.5°	10485.7	10576.8	10867.9	11523.6	12614.5	13017.4	13079.1	12423.4	12857.1	13577.5	12864.4
55°	8477.3	8645.0	10522.4	11435.4	12682.1	13468.7	14281.7	14117.1	14925.7	15765.2	14346.5
57.5°	8095.0	8200.9	9241.8	11620.6	13040.9	14330.3	15619.6	15981.4	17333.9	18308.7	16151.9
60°	8020.0	8150.9	9228.6	11847.1	13768.6	15734.3	17602.9	18238.1	20264.1	21331.5	18245.5
62.5°	7786.3	7927.5	9141.8	11817.6	14802.2	17676.5	20142.1	20637.5	23042.8	24080.8	19996.5
65°	7045.3	7177.6	8434.6	11342.8	15499.1	19749.5	23147.2	22837.0	25236.4	26017.1	20869.8
66°	6538.1	6667.5	7877.4	10784.0	15337.4	20337.6	24211.6	23517.7	25727.4	26339.0	20699.3
67.5°	5610.4	5711.9	6795.4	9533.0	14477.3	20502.3	25107.0	24029.3	25778.9	25995.0	19724.5
70°	3544.7	3574.1	4416.6	6580.7	10959.1	17780.9	23744.1	22759.0	23653.0	23067.8	16535.6
72.5°	1537.9	1527.6	2120.1	3347.7	6204.3	11930.9	19207.0	18779.1	18554.2	17219.2	11575.1
75°	855.7	867.5	1101.2	1554.1	2521.5	5860.3	12564.5	12023.5	10151.9	8662.6	5248.7
77.5°	686.6	702.8	913.0	1102.6	1132.1	2043.7	5879.4	4784.1	2880.1	2311.2	1458.4
80°	542.5	571.9	796.9	858.6	763.0	842.4	1899.5	1518.8	1139.5	1045.4	755.7
82.5°	429.3	449.9	683.6	649.9	533.7	567.5	910.1	886.6	741.0	674.8	436.7
85°	308.7	347.0	561.6	489.6	350.0	382.3	604.3	579.3	424.9	347.0	192.6
87.5°	126.4	164.7	397.0	324.9	195.6	177.9	301.4	283.8	201.4	147.0	95.5
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°	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2	4434.2
2.5°	4429.8	4465.1	4510.6	4538.6	4553.3	4563.6	4579.8	4578.3	4582.7	4584.1	4590.1
5°	4459.1	4518.0	4584.1	4601.8	4601.8	4585.6	4569.4	4543.0	4532.7	4529.7	4532.7
7.5°	4535.7	4600.3	4657.7	4637.0	4592.9	4528.3	4444.5	4371.0	4331.3	4318.1	4315.1
10°	4632.6	4710.6	4734.1	4656.2	4526.9	4371.0	4204.8	4084.2	4015.2	3996.1	3990.2
12.5°	4750.3	4823.8	4791.5	4626.8	4387.1	4135.8	3906.3	3713.8	3569.7	3524.2	3521.2
15°	4879.7	4937.0	4823.8	4535.7	4178.3	3807.8	3399.2	3066.9	2887.5	2830.2	2825.8
17.5°	5000.2	5029.6	4804.7	4376.9	3871.1	3271.3	2728.7	2472.9	2411.2	2425.8	2428.8
20°	5103.2	5103.2	4740.0	4149.0	3387.4	2564.0	2221.5	2217.1	2261.2	2305.3	2314.1
22.5°	5216.3	5148.7	4626.8	3827.0	2702.2	2098.0	2048.0	2089.2	2139.2	2187.7	2195.0
25°	5356.1	5185.4	4469.5	3338.9	2124.5	1905.5	1924.5	1958.3	1983.3	2014.2	2018.6
27.5°	5511.9	5232.5	4262.2	2666.9	1843.7	1784.8	1799.6	1811.3	1808.4	1820.1	1823.1
30°	5698.6	5286.9	3978.5	2084.8	1727.6	1681.9	1655.4	1645.2	1645.2	1664.3	1671.6
32.5°	5948.6	5367.8	3571.2	1786.3	1671.6	1608.4	1523.2	1484.9	1499.6	1564.3	1579.0
35°	6223.4	5454.6	3019.9	1684.9	1659.8	1574.6	1442.3	1371.7	1373.2	1433.5	1452.6
37.5°	6523.4	5564.8	2415.6	1665.8	1686.3	1576.1	1399.7	1302.6	1262.9	1262.9	1270.3
40°	6907.1	5678.0	1955.4	1679.0	1742.2	1593.8	1377.6	1248.2	1136.5	1139.5	1145.3
42.5°	7407.0	5775.1	1708.4	1706.9	1809.8	1617.3	1376.2	1176.2	1079.1	1145.3	1205.5
45°	7962.8	5823.6	1599.6	1732.0	1864.2	1631.9	1352.6	1164.4	1086.5	1283.5	1398.2
47.5°	8602.3	5795.6	1539.3	1740.8	1877.5	1631.9	1326.2	1192.4	1137.9	1486.3	1620.1
50°	9303.5	5714.7	1480.5	1723.1	1873.0	1629.0	1351.1	1220.3	1157.1	1521.6	1614.3
52.5°	10128.3	5647.1	1418.7	1684.9	1842.2	1612.9	1380.6	1208.5	1096.8	1383.4	1448.2
55°	11069.4	5666.2	1349.7	1630.5	1793.6	1582.0	1370.2	1161.5	1033.6	1218.8	1258.5
57.5°	12271.9	5894.1	1267.3	1561.3	1727.6	1530.5	1333.5	1139.5	1014.5	1105.6	1129.1
60°	13614.2	6291.0	1164.4	1492.3	1645.2	1448.2	1305.6	1149.7	1023.3	1096.8	1108.6
62.5°	14599.3	6521.9	1076.2	1390.8	1533.4	1357.0	1270.3	1163.0	1046.8	1127.7	1124.7
65°	14866.9	6142.6	966.0	1242.4	1382.0	1261.5	1226.2	1177.6	1057.1	1152.7	1139.5
66°	14492.0	5733.8	917.4	1173.2	1305.6	1214.4	1204.1	1176.2	1052.7	1155.6	1133.5
67.5°	13581.9	4895.8	833.6	1071.7	1183.6	1143.9	1168.8	1163.0	1041.0	1152.7	1121.8
70°	11076.7	3340.3	713.1	892.4	985.0	1007.1	1101.2	1115.9	1002.7	1101.2	1033.6
72.5°	7739.2	2034.8	630.8	692.4	796.9	858.6	1008.5	1051.2	951.2	961.6	896.8
75°	3740.2	1080.6	571.9	536.6	619.0	717.5	896.8	963.0	870.3	804.2	780.7
77.5°	1165.9	660.1	485.2	432.2	485.2	579.3	749.8	843.9	774.8	673.4	664.5
80°	626.4	485.2	373.5	347.0	383.7	454.3	589.5	704.2	666.0	604.3	539.6
82.5°	413.2	314.7	276.4	269.0	292.6	347.0	438.1	583.7	583.7	517.5	376.3
85°	213.2	192.6	189.7	189.7	204.4	230.8	298.5	449.9	479.3	273.4	226.4
87.5°	105.9	110.3	102.9	107.3	114.7	113.2	142.6	226.4	270.6	166.1	138.2
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)