

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: P190982

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-AFL-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27643.2 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

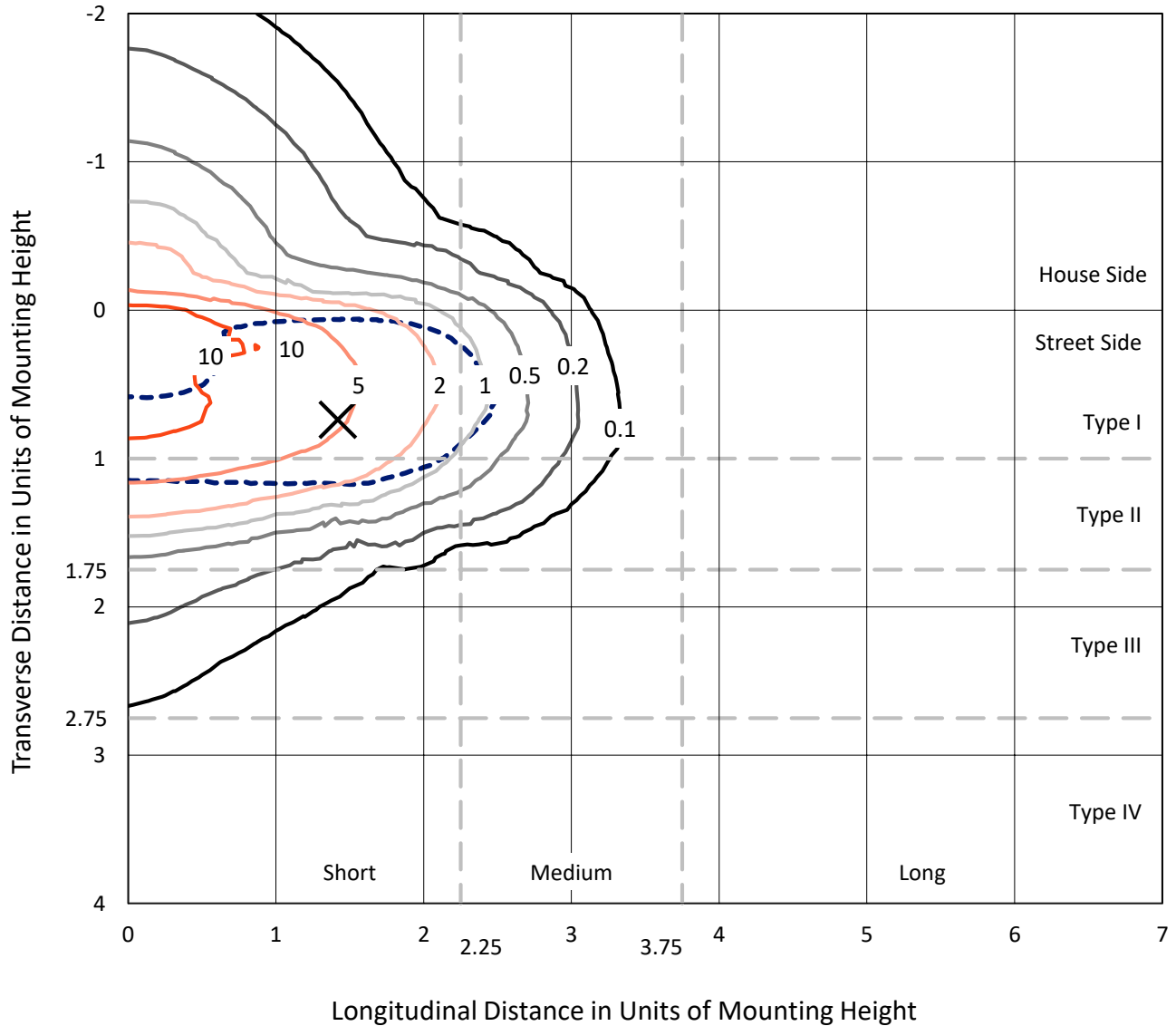
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

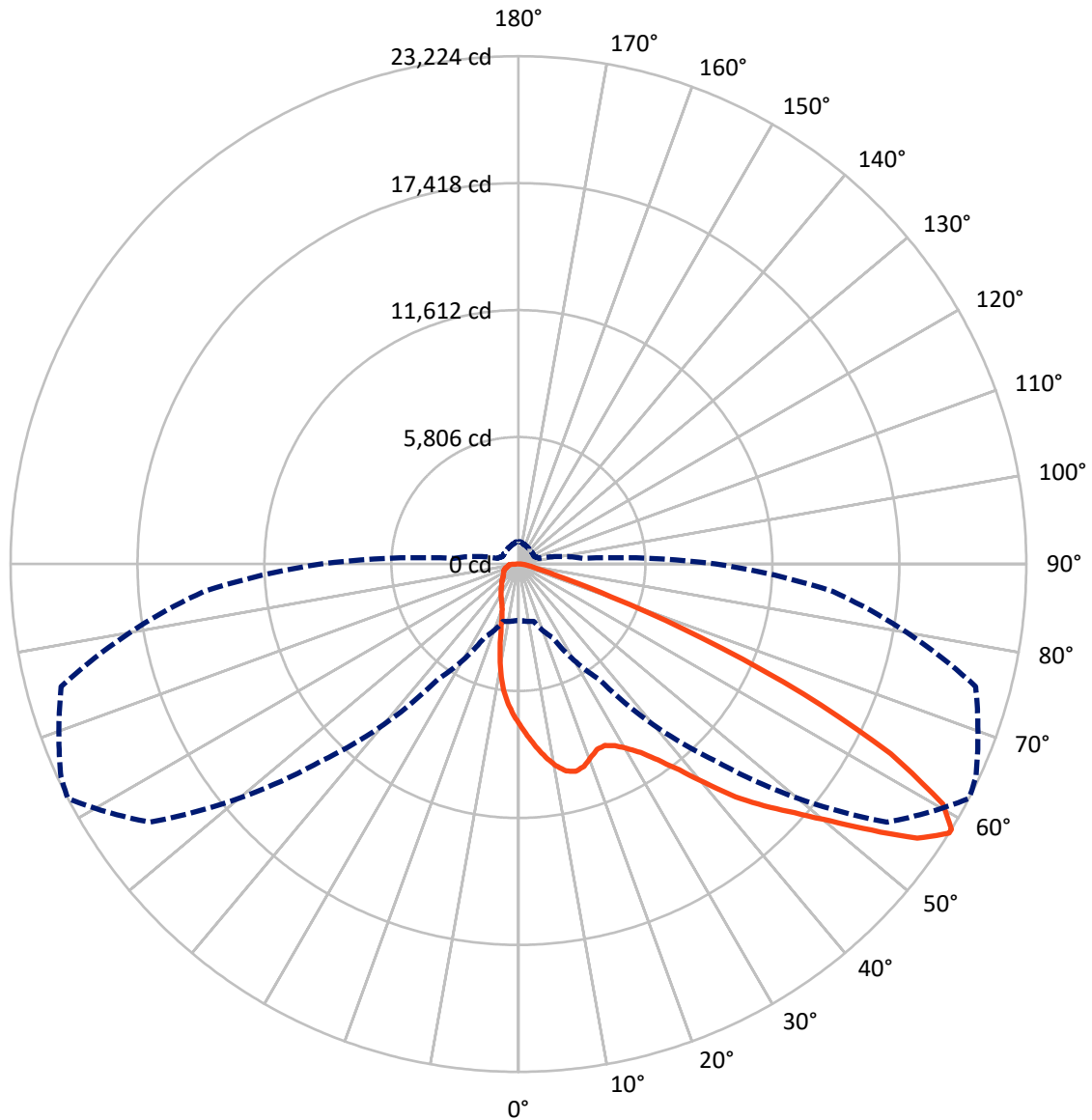
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.3 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4215.7	0.0	4215.7
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	23427.5	0.0	23427.5
	% Fixture	84.7	0.0	84.7
Total	Lumens	27643.2	0.0	27643.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	656.7	2.4
10°-20°	1678.7	6.1
20°-30°	2713.6	9.8
30°-40°	4307.8	15.6
40°-50°	6303.2	22.8
50°-60°	6592.7	23.8
60°-70°	3894.9	14.1
70°-80°	1097.2	4.0
80°-90°	398.3	1.4
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°	27643.2	100.0
0°-180°	27643.2	100.0



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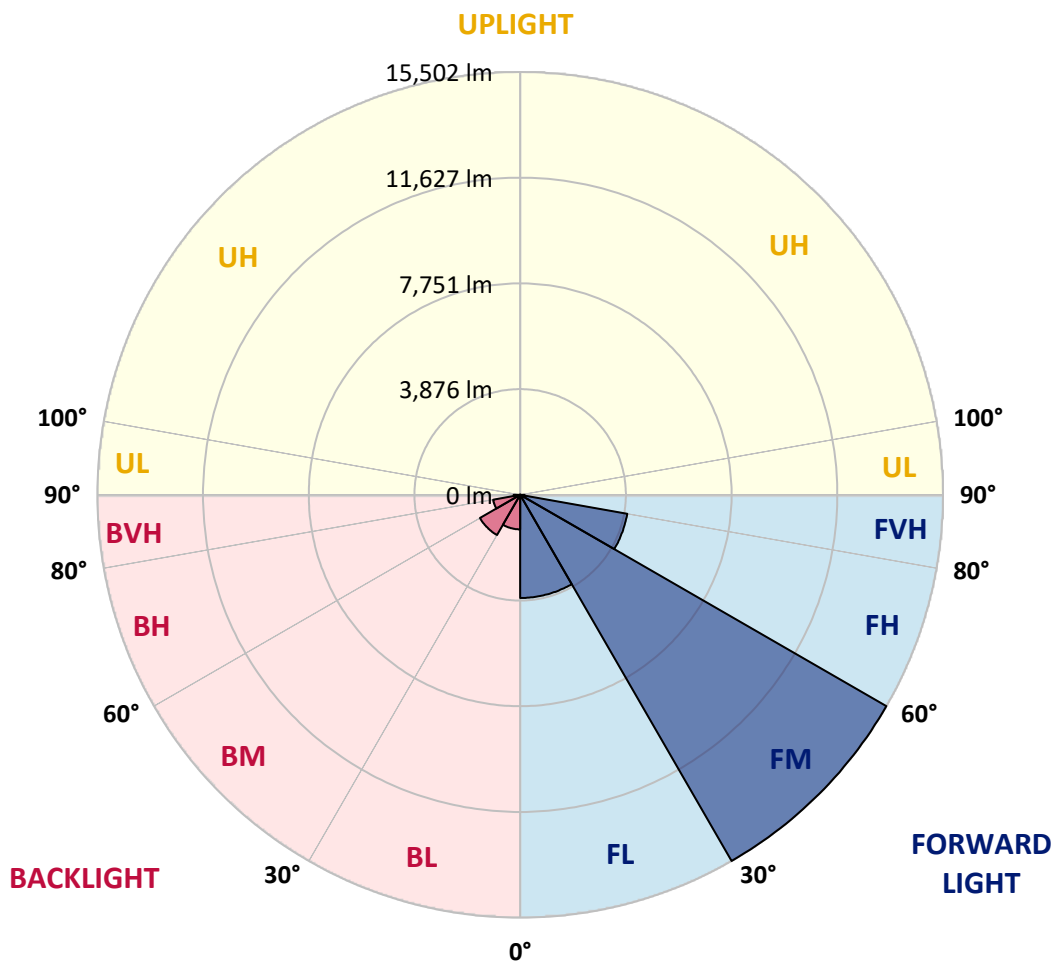
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3781.9	13.7			
FM	(30°-60°)	15502.2	56.1			
FH	(60°-80°)	3986.3	14.4			G2/5000
FVH	(80°-90°)	157.1	0.6			G2/225
BL	(0°-30°)	1267.0	4.6	B3/2500		
BM	(30°-60°)	1701.6	6.2	B2/2500		
BH	(60°-80°)	1005.9	3.6	B3/2500		G3/2500
BVH	(80°-90°)	241.2	0.9			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8
2.5°	8390.8	8323.0	8280.1	8242.3	8192.8	8087.4	7945.6	7855.8	7810.1	7655.3	7471.7
5°	9213.4	9153.5	9109.3	9058.4	8969.9	8804.6	8575.6	8393.3	8303.5	7993.7	7626.6
7.5°	9020.7	9045.4	9122.3	9256.4	9370.8	9348.7	9144.4	8912.7	8794.2	8363.3	7806.2
10°	7859.6	7902.6	8035.4	8349.0	8856.7	9377.4	9536.3	9376.1	9256.4	8729.1	7991.1
12.5°	7626.6	7625.3	7635.7	7719.1	8021.1	8753.9	9549.2	9710.7	9639.1	9078.0	8179.8
15°	7721.6	7724.2	7716.4	7751.6	7845.3	8135.6	9150.9	9839.5	9890.3	9429.5	8375.1
17.5°	7971.5	7965.1	7935.1	7935.1	7969.0	8082.2	8682.3	9719.8	9954.0	9740.5	8547.0
20°	8390.8	8360.8	8281.4	8208.5	8172.0	8233.2	8489.7	9443.8	9843.4	10012.6	8688.8
22.5°	8898.3	8874.9	8746.1	8589.9	8463.6	8462.4	8588.6	9203.0	9652.1	10269.1	8808.5
25°	9554.5	9516.7	9325.3	9075.4	8854.2	8769.6	8804.6	9191.2	9547.9	10547.6	8915.3
27.5°	10325.1	10256.0	10029.5	9668.9	9343.5	9173.0	9122.3	9403.5	9642.9	10892.6	9063.7
30°	11259.6	11180.2	10889.9	10420.1	9960.6	9680.7	9572.7	9779.6	9957.9	11313.0	9301.9
32.5°	12323.2	12208.6	11872.8	11354.7	10750.7	10323.7	10148.0	10276.9	10418.8	11819.4	9600.0
35°	13792.8	13656.1	13170.5	12455.9	11773.9	11186.8	10905.6	10999.3	11137.3	12574.3	10030.9
37.5°	14795.0	14733.9	14411.0	13739.4	12997.4	12321.9	11887.1	11941.7	12019.9	13518.1	10582.7
40°	14785.9	14810.7	14817.1	14823.7	14318.7	13671.7	13204.4	13147.1	13131.5	14554.2	11210.2
42.5°	14045.3	14146.8	14474.9	15140.0	15447.2	15150.4	14722.1	14556.8	14474.9	15775.2	11875.3
45°	12911.5	12966.2	13580.6	14879.6	16025.1	16614.8	16290.7	15770.0	15621.6	16897.3	12427.3
47.5°	12327.1	12386.9	12773.5	14189.8	16018.6	17798.0	17985.5	16993.6	16728.1	17873.5	12903.7
50°	10935.5	11060.5	11547.3	12989.6	15434.2	18342.1	19757.1	18451.5	17902.2	18823.8	13381.4
52.5°	8380.3	8572.9	9118.4	11016.3	13951.5	18072.7	21174.7	20219.2	19443.4	19807.9	13791.4
55°	5286.2	5429.4	5887.6	7780.3	11160.7	16670.8	21712.2	22131.4	21441.5	20739.9	14146.8
57.5°	2874.2	2937.9	3109.8	4295.6	7259.6	13571.5	20928.7	23219.7	22933.2	21531.3	14414.9
58°	2572.1	2615.1	2721.9	3722.8	6438.1	12724.1	20581.1	23223.5	23080.3	21647.2	14435.8
60°	1908.3	1886.1	1791.1	2124.4	3583.6	8790.3	18480.1	22294.1	22714.5	21789.1	14334.2
62.5°	1676.6	1623.2	1429.3	1407.2	1743.0	4049.6	14140.2	19097.2	20090.3	20979.4	13717.3
65°	1575.0	1517.8	1267.8	1187.1	1257.4	1713.0	8329.6	14322.5	15568.3	18524.4	12139.6
67.5°	1499.5	1425.4	1165.0	1054.4	1059.6	1132.5	3338.8	9020.7	10422.6	14064.8	9442.4
70°	1426.6	1346.0	1077.8	950.2	920.2	895.6	1327.7	4515.6	5787.3	8884.0	6020.4
72.5°	1348.6	1269.2	1001.0	868.3	809.7	727.6	867.0	1847.1	2580.0	4203.2	2731.0
75°	1235.3	1163.7	924.2	795.3	712.1	602.7	654.8	964.5	1157.2	1674.0	1316.0
77.5°	1096.0	1037.5	838.3	735.5	631.4	489.5	503.8	669.1	741.9	958.1	782.4
80°	787.6	808.3	745.8	661.2	562.3	397.0	386.6	488.2	527.2	615.7	508.9
82.5°	553.2	565.0	617.0	540.2	464.7	312.4	285.1	343.6	367.0	404.8	274.7
85°	381.4	368.4	423.1	376.1	335.8	208.3	195.3	233.0	247.3	251.2	141.9
87.5°	229.1	229.1	244.7	201.7	181.0	108.0	105.5	132.8	141.9	135.3	78.1
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°	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8	7342.8
2.5°	7362.4	7270.0	7073.4	6915.9	6716.7	6509.8	6394.0	6270.3	6185.7	6124.5	6222.1
5°	7418.3	7229.6	6823.5	6438.1	6012.5	5570.0	5234.1	4921.7	4704.3	4568.9	4696.5
7.5°	7506.8	7216.6	6569.7	5911.0	5146.9	4410.1	3751.5	3338.8	3098.0	2979.5	3053.8
10°	7608.4	7195.7	6271.6	5196.4	4103.0	3174.8	2682.8	2516.2	2461.5	2439.3	2449.8
12.5°	7693.0	7151.6	5905.8	4332.0	3081.1	2507.0	2365.2	2361.3	2372.9	2375.6	2379.5
15°	7752.8	7086.4	5363.0	3431.3	2464.1	2284.5	2276.7	2300.1	2322.2	2331.3	2336.5
17.5°	7793.2	6952.4	4749.9	2712.8	2207.6	2176.4	2194.6	2224.6	2248.0	2254.6	2259.7
20°	7789.4	6755.8	4019.6	2262.4	2068.4	2068.4	2099.6	2123.0	2124.4	2116.6	2120.5
22.5°	7749.0	6486.3	3311.5	2022.8	1944.7	1966.8	1998.1	1975.9	1884.9	1824.9	1828.8
25°	7681.3	6164.8	2704.9	1870.6	1830.2	1869.2	1860.1	1693.5	1563.4	1504.8	1504.8
27.5°	7621.4	5784.7	2238.9	1737.8	1715.6	1763.8	1602.4	1451.4	1396.7	1369.4	1360.3
30°	7578.4	5374.7	1927.9	1610.2	1607.6	1572.5	1390.2	1348.6	1339.5	1317.4	1309.5
32.5°	7588.9	4959.5	1728.7	1498.2	1507.3	1346.0	1288.7	1297.8	1289.9	1266.5	1256.2
35°	7674.8	4565.0	1598.5	1396.7	1369.4	1215.8	1228.8	1245.7	1243.1	1210.6	1200.1
37.5°	7828.3	4191.4	1512.5	1312.1	1194.9	1150.7	1171.5	1197.6	1191.0	1168.9	1161.2
40°	7989.8	3840.0	1442.3	1245.7	1092.1	1106.4	1124.6	1139.0	1145.5	1152.0	1146.8
42.5°	8147.3	3472.9	1356.3	1178.0	1049.1	1064.8	1072.6	1086.9	1122.1	1146.8	1145.5
45°	8241.0	3128.0	1267.8	1081.7	1015.3	1024.4	1019.3	1047.9	1090.8	1131.2	1132.5
47.5°	8345.1	2859.9	1197.6	993.2	982.7	989.3	973.6	1002.3	1041.4	1090.8	1096.0
50°	8471.5	2699.7	1141.6	922.9	938.6	938.6	934.6	960.7	1015.3	1072.6	1083.0
52.5°	8614.6	2668.5	1094.8	872.2	894.3	892.9	896.8	935.9	995.8	1051.8	1060.9
55°	8789.0	2753.1	1043.9	834.4	851.3	856.5	869.5	913.8	964.5	1028.4	1032.3
57.5°	8992.1	2924.9	1003.6	804.4	812.2	829.2	850.0	890.4	945.0	1015.3	1019.3
58°	9025.9	2961.3	997.1	801.9	804.4	824.0	847.4	886.5	941.1	1017.9	1021.8
60°	9027.2	3082.5	982.7	790.1	774.5	807.0	833.1	872.2	934.6	1027.0	1036.1
62.5°	8707.1	3081.1	972.3	773.2	743.3	783.6	813.6	859.1	928.1	1049.1	1067.3
65°	7667.0	2799.9	922.9	747.2	718.5	762.8	796.7	850.0	946.3	1145.5	1157.2
67.5°	5996.9	2294.9	830.4	710.7	686.0	741.9	786.2	848.7	965.9	1167.6	1175.5
70°	3965.0	1716.9	729.0	669.1	652.1	717.2	791.5	892.9	943.8	1120.7	1100.0
72.5°	2058.0	1205.3	646.9	617.0	613.1	695.1	867.0	887.7	921.6	1054.4	1028.4
75°	1080.4	837.0	575.3	559.8	566.2	689.9	1023.2	864.3	892.9	1008.8	1058.2
77.5°	661.2	675.6	514.1	507.7	520.7	674.2	1021.8	834.4	851.3	928.1	982.7
80°	442.5	548.0	467.3	468.6	477.7	617.0	917.7	787.6	800.6	877.4	933.3
82.5°	279.9	324.1	424.3	446.5	434.8	508.9	779.7	717.2	735.5	1003.6	1060.9
85°	141.9	203.1	368.4	429.5	391.8	356.7	632.6	628.7	637.8	723.7	756.3
87.5°	65.1	111.9	287.7	374.9	295.5	222.6	459.5	466.1	502.5	514.1	514.1
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)