

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: P300457

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300457
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: GLNA-AF-08-LED-E1-AFL-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27916.2 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

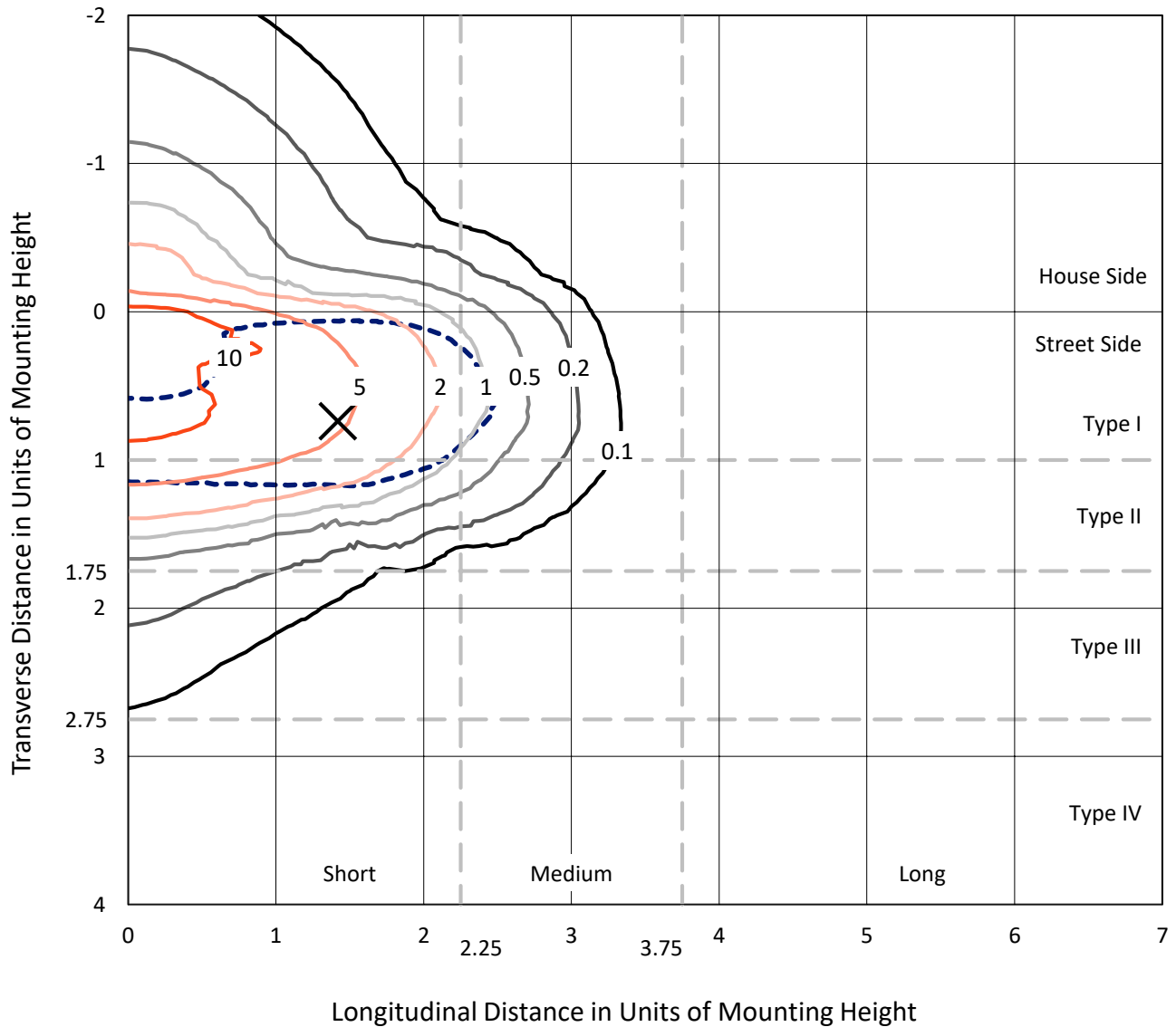
Input Watts (W): 257
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

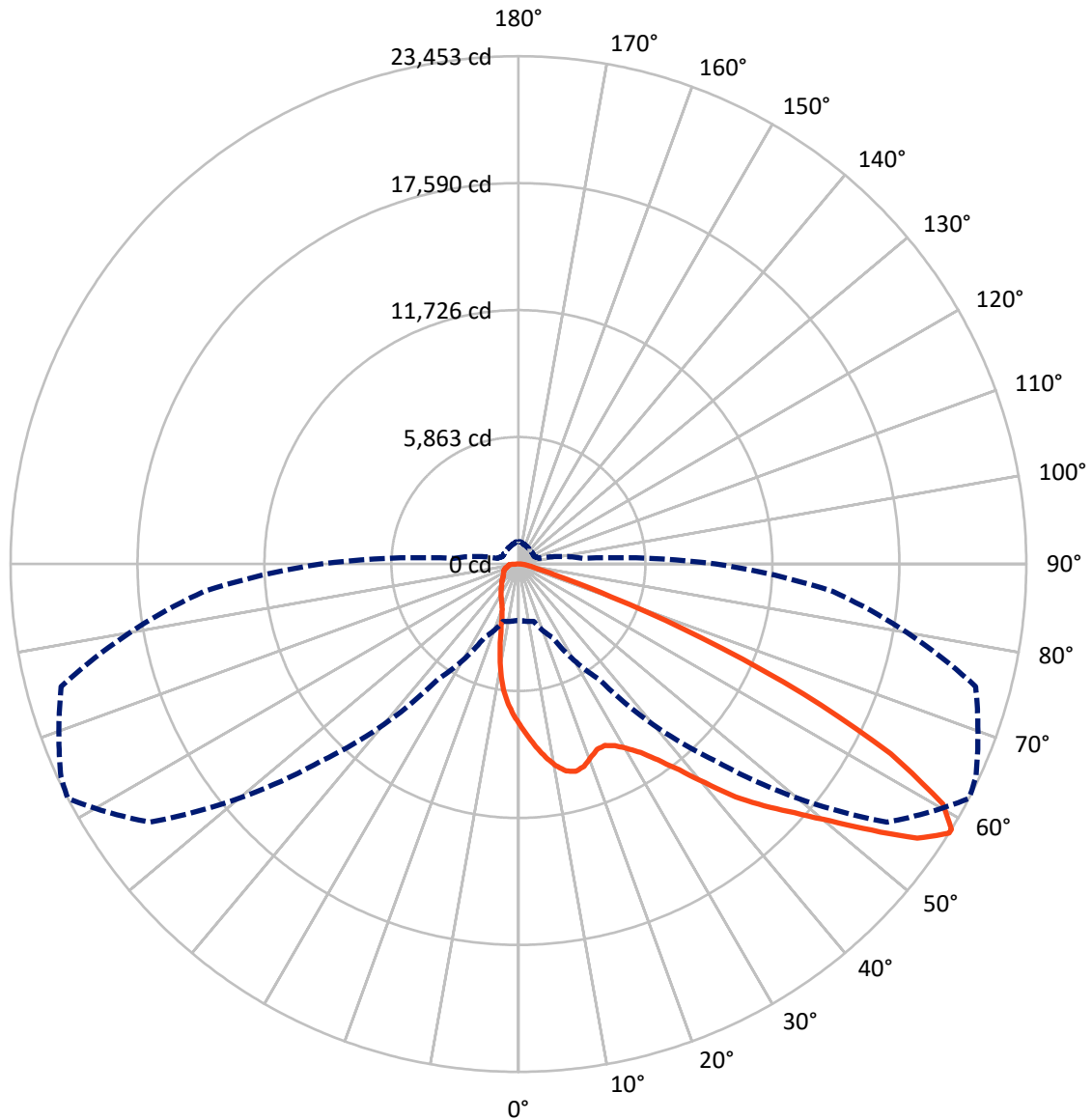
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 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	4257.3	0.0	4257.3
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	23658.9	0.0	23658.9
	% Fixture	84.7	0.0	84.7
Total	Lumens	27916.2	0.0	27916.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	663.2	2.4
10°-20°	1695.2	6.1
20°-30°	2740.4	9.8
30°-40°	4350.4	15.6
40°-50°	6365.5	22.8
50°-60°	6657.8	23.8
60°-70°	3933.4	14.1
70°-80°	1108.1	4.0
80°-90°	402.3	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°	27916.2	100.0
0°-180°	27916.2	100.0

Coefficient of Utilization



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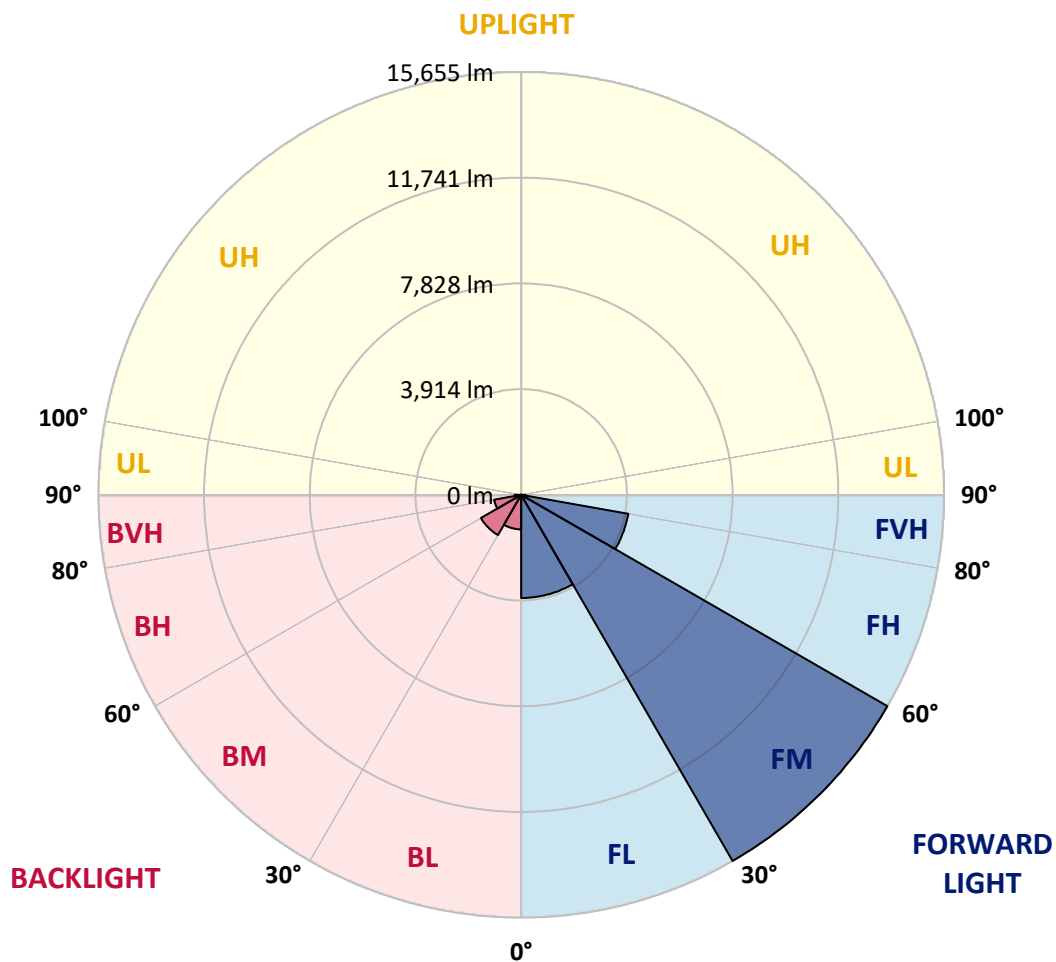
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3819.3	13.7			
FM	(30°-60°)	15655.3	56.1			
FH	(60°-80°)	4025.6	14.4			G2/5000
FVH	(80°-90°)	158.7	0.6			G2/225
BL	(0°-30°)	1279.5	4.6	B3/2500		
BM	(30°-60°)	1718.4	6.2	B2/2500		
BH	(60°-80°)	1015.8	3.6	B3/2500		G3/2500
BVH	(80°-90°)	243.6	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°	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4
2.5°	8473.6	8405.2	8361.9	8323.7	8273.8	8167.3	8024.0	7933.3	7887.3	7730.9	7545.5
5°	9304.4	9243.9	9199.2	9148.0	9058.6	8891.6	8660.3	8476.2	8385.5	8072.7	7702.0
7.5°	9109.8	9134.8	9212.4	9347.8	9463.5	9441.1	9234.7	9000.7	8881.1	8446.0	7883.4
10°	7937.3	7980.6	8114.7	8431.5	8944.2	9470.0	9630.4	9468.7	9347.8	8815.4	8070.0
12.5°	7702.0	7700.6	7711.2	7795.3	8100.3	8840.4	9643.5	9806.5	9734.2	9167.7	8260.6
15°	7797.9	7800.5	7792.7	7828.2	7922.8	8215.9	9241.3	9936.7	9988.0	9522.6	8457.8
17.5°	8050.3	8043.7	8013.5	8013.5	8047.7	8162.0	8768.1	9815.8	10052.4	9836.8	8631.3
20°	8473.6	8443.4	8363.2	8289.6	8252.8	8314.5	8573.5	9537.1	9940.6	10111.5	8774.6
22.5°	8986.3	8962.6	8832.5	8674.7	8547.2	8545.9	8673.4	9293.9	9747.4	10370.5	8895.6
25°	9648.8	9610.7	9417.4	9165.0	8941.6	8856.1	8891.6	9282.0	9642.2	10651.8	9003.4
27.5°	10427.0	10357.3	10128.6	9764.5	9435.8	9263.6	9212.4	9496.3	9738.2	11000.2	9153.2
30°	11370.9	11290.7	10997.5	10523.0	10058.9	9776.3	9667.2	9876.2	10056.3	11424.8	9393.8
32.5°	12444.9	12329.2	11990.0	11466.8	10856.9	10425.7	10248.2	10378.4	10521.7	11936.1	9694.8
35°	13929.0	13791.0	13300.6	12578.9	11890.1	11297.3	11013.3	11108.0	11247.3	12698.6	10129.9
37.5°	14941.2	14879.4	14553.4	13875.1	13125.8	12443.5	12004.5	12059.7	12138.6	13651.6	10687.3
40°	14932.0	14957.0	14963.5	14970.1	14460.1	13806.7	13334.8	13277.0	13261.2	14698.0	11320.9
42.5°	14184.0	14286.5	14617.8	15289.5	15599.8	15300.1	14867.6	14700.6	14617.8	15931.0	11992.6
45°	13039.0	13094.2	13714.7	15026.6	16183.4	16778.9	16451.6	15925.8	15775.9	17064.2	12550.0
47.5°	12448.8	12509.3	12899.7	14329.9	16176.9	17973.9	18163.1	17161.5	16893.3	18050.1	13031.1
50°	11043.5	11169.7	11661.4	13117.9	15586.6	18523.3	19952.3	18633.8	18079.0	19009.7	13513.6
52.5°	8463.1	8657.6	9208.4	11125.0	14089.4	18251.2	21383.8	20418.9	19635.4	20003.5	13927.7
55°	5338.4	5483.0	5945.7	7857.1	11271.0	16835.5	21926.7	22350.0	21653.3	20944.7	14286.5
57.5°	2902.5	2966.9	3140.5	4338.0	7331.3	13705.5	21135.3	23449.0	23159.8	21744.0	14557.3
58°	2597.6	2640.9	2748.7	3759.6	6501.8	12849.7	20784.4	23452.9	23308.3	21861.0	14578.4
60°	1927.1	1904.8	1808.8	2145.3	3619.0	8877.2	18662.7	22514.3	22938.9	22004.3	14475.8
62.5°	1693.1	1639.2	1443.4	1421.0	1760.2	4089.6	14280.0	19285.8	20288.8	21186.6	13852.7
65°	1590.6	1532.8	1280.4	1198.9	1269.9	1729.9	8411.8	14464.0	15722.0	18707.4	12259.5
67.5°	1514.4	1439.4	1176.5	1064.8	1070.0	1143.7	3371.8	9109.8	10525.6	14203.7	9535.8
70°	1440.7	1359.2	1088.4	959.6	929.4	904.4	1340.8	4560.2	5844.5	8971.8	6079.8
72.5°	1361.9	1281.7	1010.9	876.8	817.7	734.8	875.5	1865.3	2605.4	4244.7	2757.9
75°	1247.5	1175.2	933.3	803.2	719.1	608.6	661.2	974.1	1168.6	1690.5	1329.0
77.5°	1106.9	1047.7	846.6	742.7	637.6	494.3	508.7	675.7	749.3	967.5	790.0
80°	795.3	816.3	753.2	667.8	567.9	400.9	390.4	493.0	532.4	621.8	514.0
82.5°	558.7	570.5	623.1	545.5	469.3	315.5	287.9	347.0	370.7	408.8	277.4
85°	385.2	372.0	427.2	379.9	339.2	210.3	197.2	235.3	249.8	253.7	143.3
87.5°	231.4	231.4	247.1	203.8	182.7	109.1	106.5	134.1	143.3	136.7	78.9
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°	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4	7415.4
2.5°	7435.1	7341.8	7143.3	6984.2	6783.1	6574.1	6457.1	6332.2	6246.7	6185.0	6283.6
5°	7491.6	7301.0	6890.9	6501.8	6071.9	5625.0	5285.8	4970.3	4750.8	4614.1	4742.9
7.5°	7581.0	7287.9	6634.5	5969.4	5197.7	4453.7	3788.5	3371.8	3128.6	3009.0	3083.9
10°	7683.5	7266.8	6333.5	5247.7	4143.5	3206.2	2709.3	2541.0	2485.8	2463.5	2474.0
12.5°	7769.0	7222.1	5964.1	4374.8	3111.5	2531.8	2388.5	2384.6	2396.4	2399.1	2403.0
15°	7829.5	7156.4	5415.9	3465.2	2488.4	2307.0	2299.1	2322.8	2345.2	2354.4	2359.6
17.5°	7870.2	7021.0	4796.8	2739.5	2229.5	2197.9	2216.3	2246.6	2270.2	2276.8	2282.1
20°	7866.3	6822.5	4059.3	2284.7	2088.8	2088.8	2120.4	2144.0	2145.3	2137.5	2141.4
22.5°	7825.5	6550.4	3344.2	2042.8	1963.9	1986.3	2017.8	1995.5	1903.5	1843.0	1846.9
25°	7757.2	6225.7	2731.6	1889.0	1848.3	1887.7	1878.5	1710.2	1578.8	1519.6	1519.6
27.5°	7696.7	5841.9	2261.0	1754.9	1732.6	1781.2	1618.2	1465.7	1410.5	1382.9	1373.7
30°	7653.3	5427.8	1946.8	1626.1	1623.5	1588.0	1403.9	1361.9	1352.7	1330.3	1322.4
32.5°	7663.8	5008.4	1745.7	1513.0	1522.2	1359.2	1301.4	1310.6	1302.7	1279.1	1268.5
35°	7750.6	4610.1	1614.3	1410.5	1382.9	1227.8	1240.9	1258.0	1255.4	1222.5	1212.0
37.5°	7905.7	4232.9	1527.5	1325.1	1206.8	1162.1	1183.1	1209.4	1202.8	1180.5	1172.6
40°	8068.7	3877.9	1456.5	1258.0	1102.9	1117.4	1135.8	1150.2	1156.8	1163.4	1158.1
42.5°	8227.8	3507.2	1369.8	1189.7	1059.5	1075.3	1083.2	1097.6	1133.1	1158.1	1156.8
45°	8322.4	3158.9	1280.4	1092.4	1025.3	1034.6	1029.3	1058.2	1101.6	1142.3	1143.7
47.5°	8427.6	2888.1	1209.4	1003.0	992.5	999.1	983.3	1012.2	1051.6	1101.6	1106.9
50°	8555.1	2726.4	1152.9	932.0	947.8	947.8	943.8	970.1	1025.3	1083.2	1093.7
52.5°	8699.7	2694.8	1105.5	880.7	903.1	901.8	905.7	945.2	1005.6	1062.2	1071.4
55°	8875.8	2780.3	1054.3	842.6	859.7	865.0	878.1	922.8	974.1	1038.5	1042.4
57.5°	9080.9	2953.8	1013.5	812.4	820.3	837.4	858.4	899.2	954.4	1025.3	1029.3
58°	9115.1	2990.6	1006.9	809.8	812.4	832.1	855.8	895.2	950.4	1028.0	1031.9
60°	9116.4	3112.9	992.5	797.9	782.2	815.0	841.3	880.7	943.8	1037.2	1046.4
62.5°	8793.0	3111.5	982.0	780.8	750.6	791.4	821.6	867.6	937.3	1059.5	1077.9
65°	7742.7	2827.6	932.0	754.6	725.6	770.3	804.5	858.4	955.7	1156.8	1168.6
67.5°	6056.1	2317.6	838.7	717.7	692.8	749.3	794.0	857.1	975.4	1179.2	1187.0
70°	4004.1	1733.9	736.1	675.7	658.6	724.3	799.2	901.8	953.0	1131.8	1110.8
72.5°	2078.3	1217.3	653.3	623.1	619.2	702.0	875.5	896.5	930.7	1064.8	1038.5
75°	1091.1	845.3	581.0	565.3	571.8	696.7	1033.2	872.9	901.8	1018.8	1068.7
77.5°	667.8	682.3	519.2	512.7	525.8	680.9	1031.9	842.6	859.7	937.3	992.5
80°	446.9	553.4	471.9	473.2	482.4	623.1	926.8	795.3	808.4	886.0	942.5
82.5°	282.6	327.3	428.5	450.9	439.1	514.0	787.4	724.3	742.7	1013.5	1071.4
85°	143.3	205.1	372.0	433.8	395.7	360.2	638.9	634.9	644.1	730.9	763.8
87.5°	65.7	113.1	290.5	378.6	298.4	224.8	464.0	470.6	507.4	519.2	519.2
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)