

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: P191610

Luminaire Tested: **GLEON-AF-02-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-5MQ-7050
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12794 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

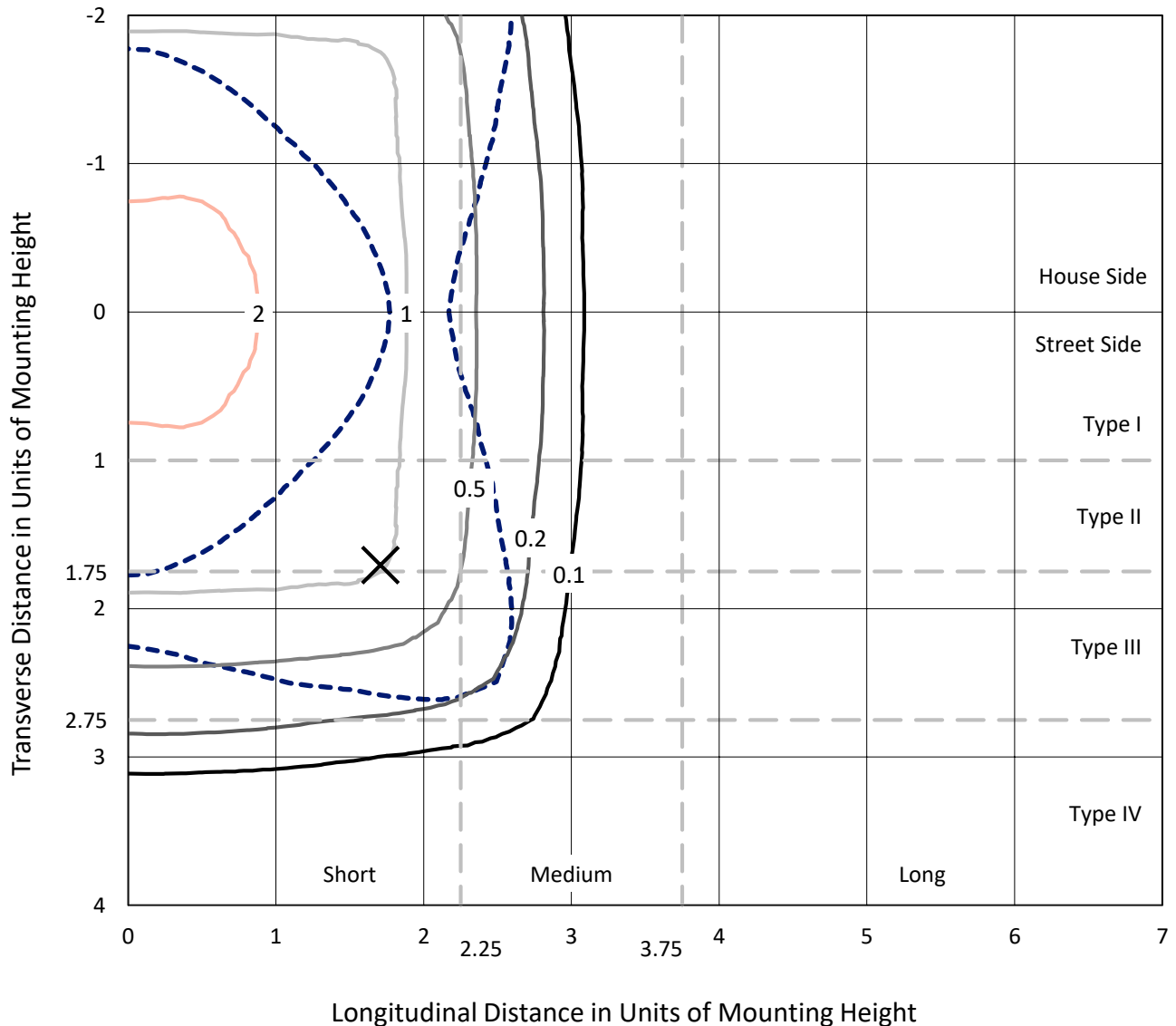
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

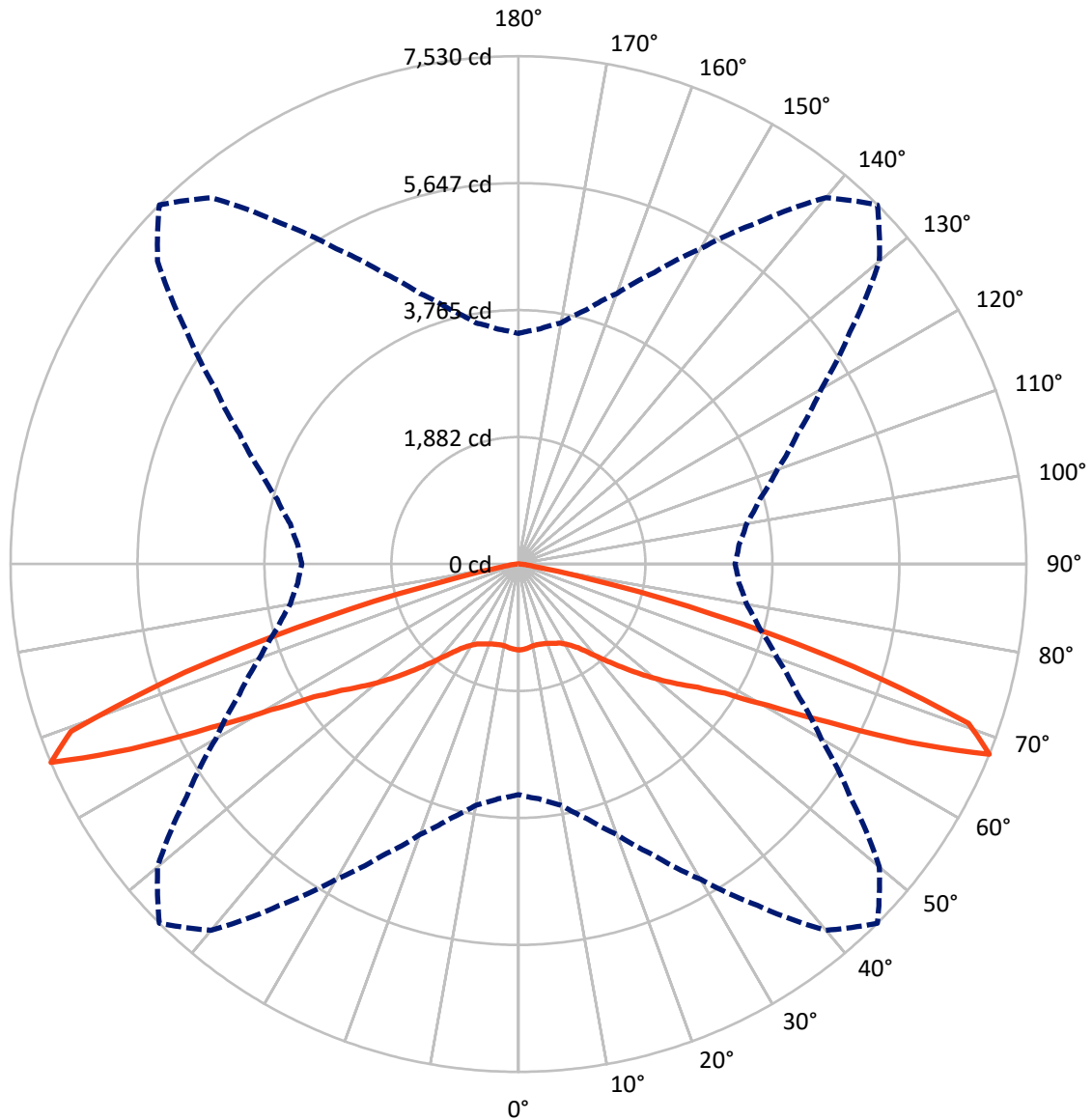
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6397.0	0.0	6397.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6397.0	0.0	6397.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	12794.0	0.0	12794.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	0.9
10°-20°	346.3	2.7
20°-30°	588.7	4.6
30°-40°	962.3	7.5
40°-50°	1717.9	13.4
50°-60°	2896.4	22.6
60°-70°	4494.7	35.1
70°-80°	1579.2	12.3
80°-90°	89.2	0.7
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°	12794.0	100.0
0°-180°	12794.0	100.0



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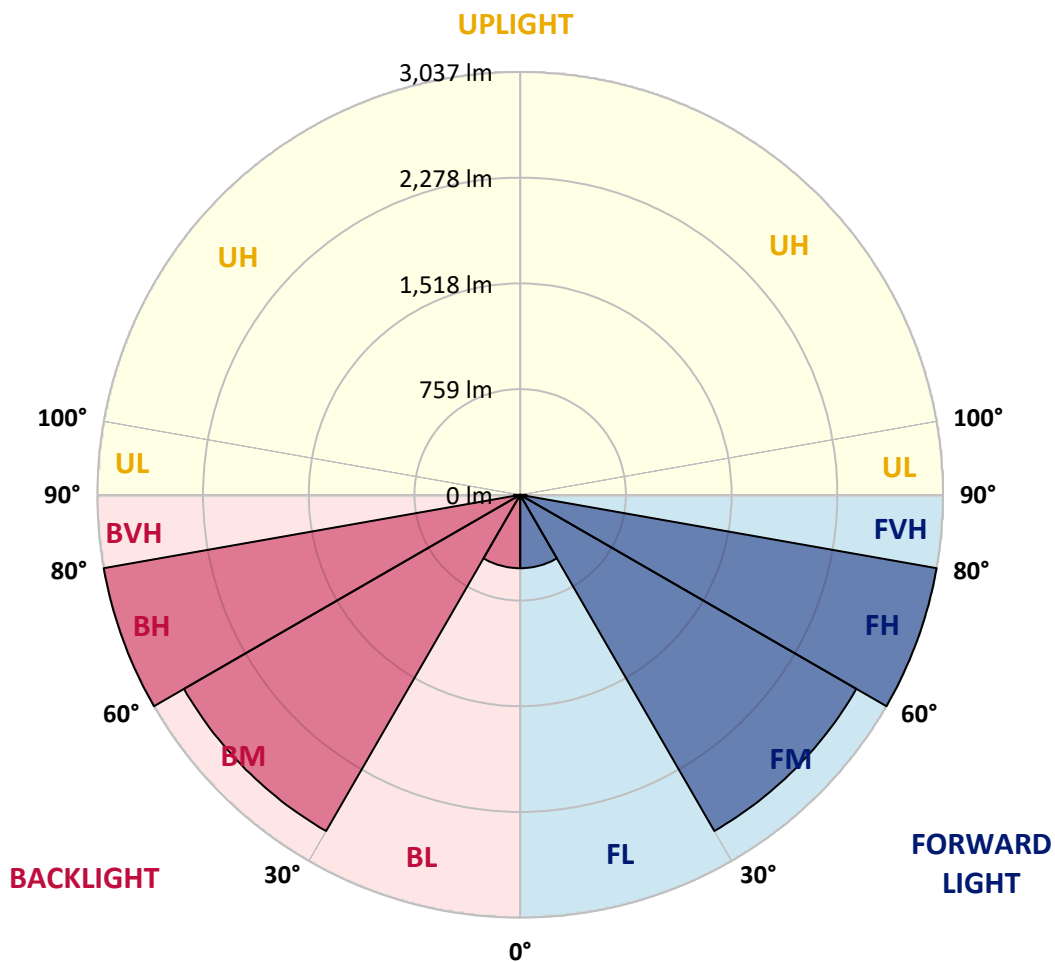
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	527.1	4.1			
FM	(30°-60°)	2788.3	21.8			
FH	(60°-80°)	3037.0	23.7			G2/5000
FVH	(80°-90°)	44.6	0.3			G1/100
BL	(0°-30°)	527.1	4.1	B2/1000		
BM	(30°-60°)	2788.3	21.8	B3/5000		
BH	(60°-80°)	3037.0	23.7	B4/5000		G2/5000
BVH	(80°-90°)	44.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1270.3	1271.4	1271.4	1271.4	1270.9	1270.9	1269.7	1270.9	1270.3	1268.5	1269.1
5°	1259.7	1260.9	1260.9	1260.3	1262.0	1261.4	1259.7	1260.9	1260.3	1259.1	1259.7
7.5°	1244.4	1246.1	1246.1	1245.6	1247.3	1246.7	1245.6	1246.1	1246.1	1244.4	1244.4
10°	1227.3	1228.5	1228.5	1227.9	1230.8	1230.8	1230.3	1232.0	1232.6	1230.8	1229.7
12.5°	1211.4	1213.2	1213.2	1215.6	1218.5	1219.7	1222.6	1225.0	1227.3	1226.7	1224.4
15°	1202.0	1203.2	1205.5	1208.5	1213.2	1217.3	1222.0	1227.3	1232.0	1233.2	1229.7
17.5°	1196.1	1197.9	1201.4	1205.5	1212.0	1219.1	1226.1	1233.2	1239.7	1242.0	1237.9
20°	1194.4	1195.5	1199.1	1206.1	1215.0	1225.6	1235.6	1243.8	1252.6	1255.6	1252.6
22.5°	1197.9	1200.3	1204.4	1212.6	1224.4	1237.9	1249.7	1260.9	1272.0	1277.3	1273.2
25°	1213.8	1216.1	1221.4	1232.0	1245.0	1259.1	1272.6	1285.6	1295.6	1300.9	1297.9
27.5°	1243.2	1246.1	1252.6	1263.2	1277.3	1292.6	1307.3	1317.9	1326.2	1327.9	1324.4
30°	1287.3	1293.8	1301.5	1313.2	1329.7	1342.6	1357.3	1366.8	1376.8	1376.8	1373.8
32.5°	1356.2	1362.6	1370.9	1382.1	1395.0	1409.1	1422.1	1430.3	1440.9	1441.5	1434.4
35°	1459.1	1462.1	1469.1	1476.2	1488.0	1500.3	1511.5	1516.8	1525.6	1526.2	1519.7
37.5°	1595.0	1595.6	1600.3	1602.7	1613.3	1626.8	1637.4	1640.9	1649.2	1648.0	1641.5
40°	1753.3	1756.3	1758.0	1761.5	1772.7	1785.7	1796.9	1798.6	1807.4	1805.7	1797.4
42.5°	1936.3	1937.5	1947.5	1952.8	1963.4	1969.8	1983.9	1985.7	1996.3	1991.6	1982.2
45°	2141.6	2152.2	2161.6	2172.2	2183.4	2191.1	2202.2	2199.9	2206.9	2199.9	2194.6
47.5°	2357.6	2365.2	2386.4	2402.9	2421.1	2427.6	2443.5	2436.4	2443.5	2433.5	2431.7
50°	2595.3	2608.8	2627.0	2645.9	2665.3	2675.9	2696.5	2687.6	2697.0	2687.6	2682.3
52.5°	2829.4	2833.0	2873.0	2900.6	2927.7	2940.0	2952.4	2948.3	2948.9	2948.3	2943.0
55°	3051.8	3060.1	3100.1	3137.7	3184.8	3219.5	3240.7	3238.3	3233.0	3227.7	3218.9
57.5°	3302.5	3310.7	3356.6	3403.1	3456.6	3506.0	3549.0	3593.1	3610.2	3614.9	3595.5
60°	3641.4	3640.8	3702.0	3758.4	3834.9	3908.5	4002.6	4098.5	4208.5	4259.7	4192.1
62.5°	3986.1	4000.3	4088.5	4188.5	4346.2	4499.8	4673.3	4844.0	5018.1	5159.9	5009.3
65°	3945.0	3999.1	4130.3	4356.8	4648.0	4994.0	5368.2	5764.2	6121.9	6367.8	6091.9
67.5°	3419.0	3496.0	3629.6	3904.9	4269.1	4768.1	5396.4	6179.5	7089.7	7529.8	6984.4
70°	2478.2	2565.2	2705.3	2974.2	3334.8	3809.0	4491.5	5431.7	6636.7	7080.3	6479.6
72.5°	1233.2	1280.3	1366.8	1538.0	1811.0	2195.8	2814.7	3718.4	4784.5	5191.7	4642.7
75°	418.9	440.7	455.4	511.3	597.8	749.0	1056.7	1625.6	2479.9	2973.0	2444.6
77.5°	241.8	242.4	252.4	262.4	277.1	293.6	334.8	439.5	760.2	1079.6	786.6
80°	156.5	155.9	164.2	171.8	181.8	190.0	192.4	203.6	234.8	278.3	248.9
82.5°	81.2	91.2	109.4	119.4	138.3	141.8	137.1	133.0	140.6	145.9	149.4
85°	44.7	38.8	58.2	75.3	83.5	84.7	84.7	80.0	83.0	81.2	88.3
87.5°	20.6	18.8	22.9	37.1	39.4	33.5	35.3	31.2	22.4	21.8	24.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1269.1	1269.7	1269.7	1271.4	1272.0	1273.2	1274.4	1275.0
5°	1259.1	1260.9	1259.7	1261.4	1261.4	1262.6	1262.6	1263.2
7.5°	1244.4	1246.1	1246.1	1246.1	1245.6	1247.3	1247.3	1247.3
10°	1229.1	1230.3	1229.7	1228.5	1227.3	1229.1	1228.5	1227.9
12.5°	1224.4	1221.4	1219.1	1217.9	1215.6	1216.1	1214.4	1214.4
15°	1227.3	1222.0	1217.9	1216.1	1213.8	1212.6	1211.4	1212.0
17.5°	1235.0	1228.5	1223.2	1220.3	1217.3	1215.6	1213.2	1213.8
20°	1248.5	1240.9	1233.2	1227.3	1222.0	1219.1	1217.3	1216.7
22.5°	1268.5	1257.3	1246.1	1237.3	1230.3	1226.1	1224.4	1223.2
25°	1291.5	1279.1	1266.2	1256.1	1249.1	1243.8	1240.3	1240.3
27.5°	1320.3	1310.3	1298.5	1286.7	1280.3	1275.0	1272.6	1271.4
30°	1368.5	1359.1	1349.7	1338.5	1330.3	1325.0	1320.9	1317.3
32.5°	1430.3	1422.7	1415.0	1406.8	1399.1	1392.1	1385.6	1382.6
35°	1517.4	1511.5	1506.2	1496.8	1493.8	1489.7	1486.2	1483.3
37.5°	1637.4	1635.1	1635.1	1625.1	1622.7	1620.9	1617.4	1618.0
40°	1795.1	1797.4	1794.5	1791.0	1789.2	1784.5	1784.5	1788.6
42.5°	1981.6	1983.4	1989.8	1983.9	1990.4	1984.5	1981.0	1983.9
45°	2198.1	2204.6	2217.5	2211.6	2215.8	2205.8	2193.4	2194.0
47.5°	2441.1	2447.0	2452.3	2448.2	2448.8	2432.3	2415.8	2411.7
50°	2693.5	2695.9	2698.8	2692.9	2694.1	2675.9	2657.0	2657.6
52.5°	2943.0	2954.2	2965.9	2950.0	2946.5	2925.9	2899.4	2888.8
55°	3228.3	3244.2	3230.7	3203.0	3175.4	3147.7	3113.0	3107.1
57.5°	3580.2	3553.1	3510.7	3458.4	3420.1	3381.3	3346.0	3331.3
60°	4069.7	3967.9	3891.4	3813.7	3764.9	3717.3	3670.8	3663.7
62.5°	4761.6	4585.7	4433.3	4272.7	4141.5	4039.1	3957.3	3934.4
65°	5628.8	5212.9	4852.2	4515.7	4223.2	4002.6	3863.8	3802.6
67.5°	6001.9	5180.5	4562.1	4084.4	3702.0	3434.8	3284.8	3210.1
70°	5274.1	4296.2	3623.7	3145.4	2797.1	2512.3	2376.4	2296.4
72.5°	3628.4	2732.9	2161.0	1763.9	1485.6	1247.3	1153.2	1146.1
75°	1629.2	1079.1	743.7	573.1	482.5	419.5	400.1	385.4
77.5°	456.0	337.1	300.7	281.2	262.4	240.6	232.4	234.2
80°	221.8	209.5	201.2	188.9	171.8	153.6	145.3	148.9
82.5°	147.1	145.3	150.6	141.8	117.1	99.4	83.5	76.5
85°	89.4	90.6	92.4	93.0	78.8	55.3	37.7	42.4
87.5°	35.3	40.6	44.1	45.9	43.0	26.5	21.2	21.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)