

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: P191620

Luminaire Tested: **GLEON-AF-02-LED-E1-5MQ-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191620  
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-7050-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14034 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

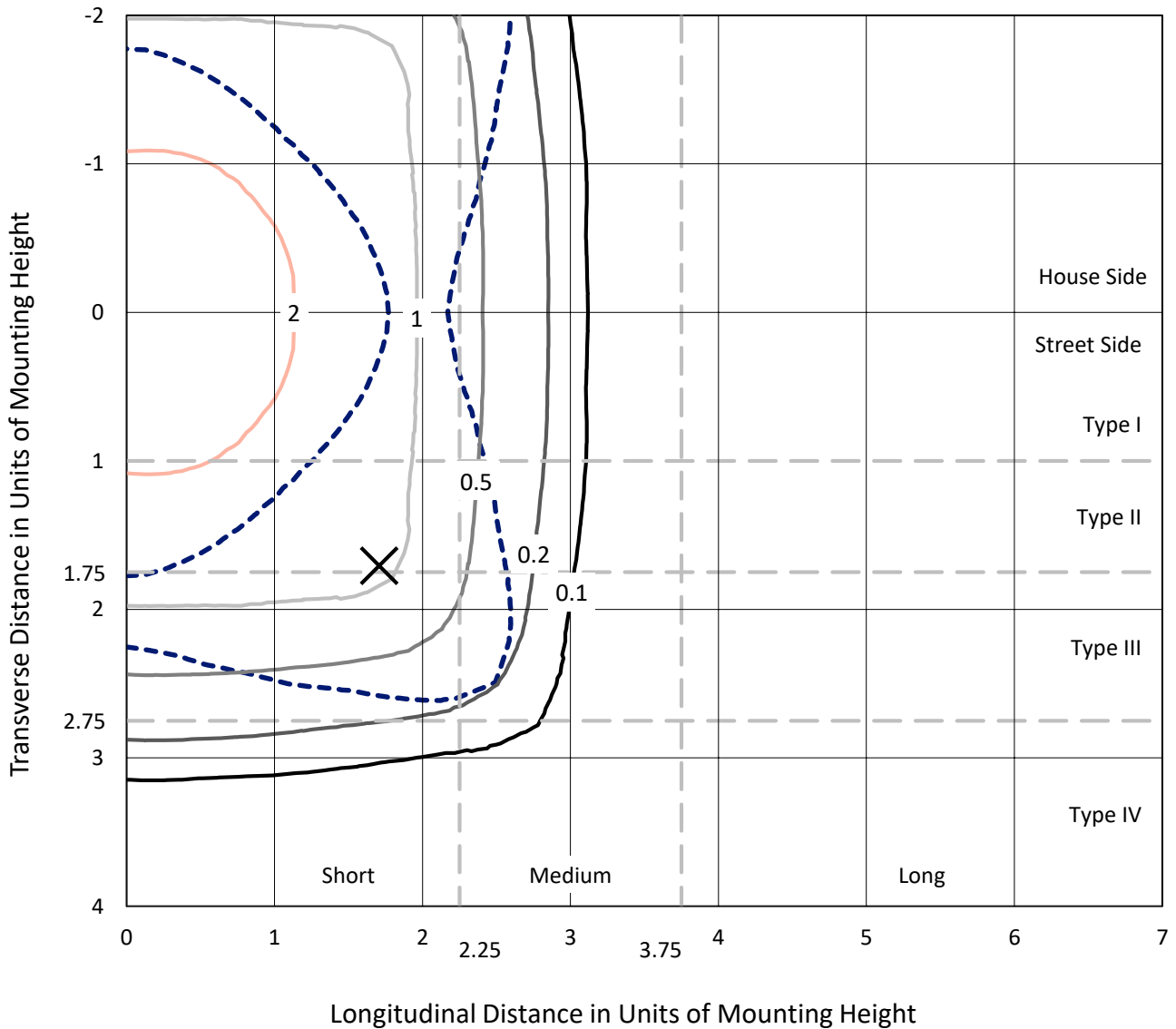
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

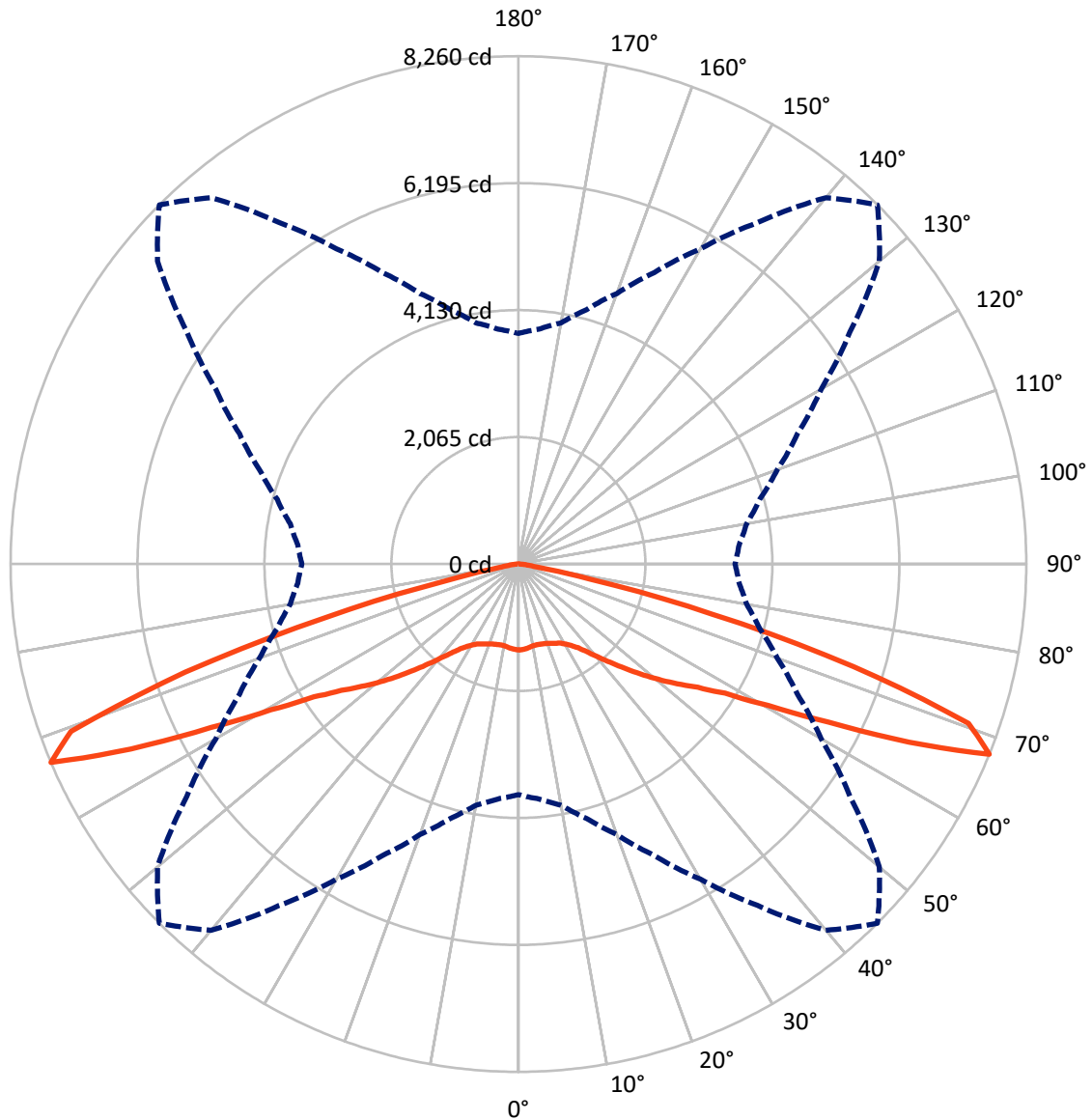
× Max cd  
- - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.5 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
<b>House Side</b>	Lumens	7017.0	0.0	7017.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7017.0	0.0	7017.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	14034.0	0.0	14034.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.9	0.9
10°-20°	379.8	2.7
20°-30°	645.7	4.6
30°-40°	1055.5	7.5
40°-50°	1884.4	13.4
50°-60°	3177.1	22.6
60°-70°	4930.4	35.1
70°-80°	1732.3	12.3
80°-90°	97.9	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°	14034.0	100.0
0°-180°	14034.0	100.0



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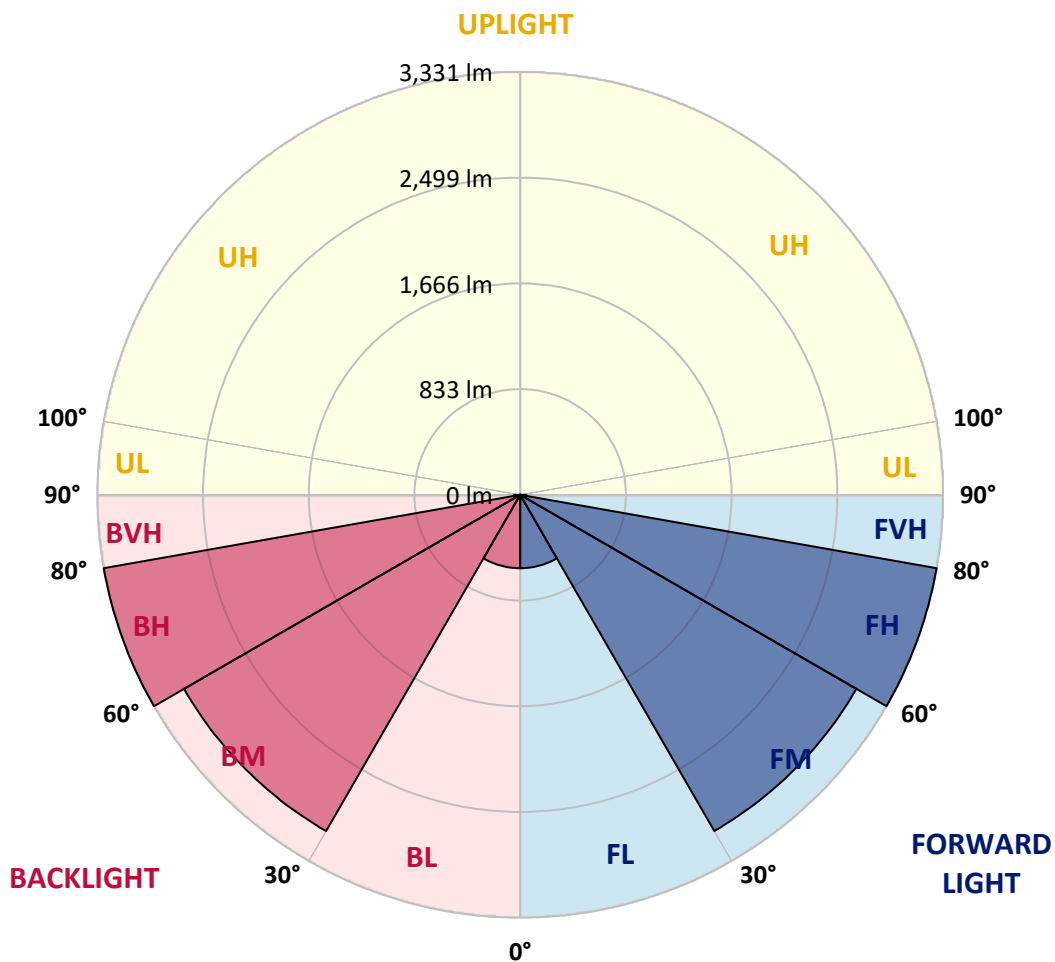
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	578.2	4.1			
FM (30°-60°)	3058.5	21.8			
FH (60°-80°)	3331.3	23.7			G2/5000
FVH (80°-90°)	48.9	0.3			G1/100
BL (0°-30°)	578.2	4.1	B2/1000		
BM (30°-60°)	3058.5	21.8	B3/5000		
BH (60°-80°)	3331.3	23.7	B4/5000		G2/5000
BVH (80°-90°)	48.9	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°	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5
2.5°	1393.4	1394.7	1394.7	1394.7	1394.0	1394.0	1392.7	1394.0	1393.4	1391.4	1392.1
5°	1381.8	1383.1	1383.1	1382.4	1384.3	1383.7	1381.8	1383.1	1382.4	1381.1	1381.8
7.5°	1365.0	1366.9	1366.9	1366.3	1368.2	1367.6	1366.3	1366.9	1366.9	1365.0	1365.0
10°	1346.3	1347.6	1347.6	1346.9	1350.1	1350.1	1349.5	1351.4	1352.1	1350.1	1348.9
12.5°	1328.8	1330.8	1330.8	1333.4	1336.6	1337.9	1341.1	1343.7	1346.3	1345.6	1343.0
15°	1318.5	1319.8	1322.4	1325.6	1330.8	1335.3	1340.5	1346.3	1351.4	1352.7	1348.9
17.5°	1312.1	1314.0	1317.9	1322.4	1329.5	1337.2	1345.0	1352.7	1359.8	1362.4	1357.9
20°	1310.1	1311.4	1315.3	1323.0	1332.7	1344.3	1355.3	1364.3	1374.0	1377.2	1374.0
22.5°	1314.0	1316.6	1321.1	1330.1	1343.0	1357.9	1370.8	1383.1	1395.3	1401.1	1396.6
25°	1331.4	1334.0	1339.8	1351.4	1365.6	1381.1	1396.0	1410.2	1421.1	1426.9	1423.7
27.5°	1363.7	1366.9	1374.0	1385.6	1401.1	1417.9	1434.0	1445.7	1454.7	1456.6	1452.8
30°	1412.1	1419.2	1427.6	1440.5	1458.6	1472.8	1488.9	1499.2	1510.2	1510.2	1507.0
32.5°	1487.6	1494.7	1503.7	1516.0	1530.2	1545.7	1559.9	1568.9	1580.5	1581.2	1573.4
35°	1600.6	1603.8	1611.5	1619.3	1632.2	1645.7	1658.0	1663.8	1673.5	1674.1	1667.0
37.5°	1749.6	1750.3	1755.4	1758.0	1769.6	1784.5	1796.1	1800.0	1809.0	1807.7	1800.6
40°	1923.2	1926.5	1928.4	1932.3	1944.5	1958.7	1971.0	1972.9	1982.6	1980.7	1971.6
42.5°	2124.0	2125.2	2136.2	2142.0	2153.6	2160.7	2176.2	2178.2	2189.8	2184.6	2174.3
45°	2349.2	2360.8	2371.1	2382.8	2395.0	2403.4	2415.7	2413.1	2420.8	2413.1	2407.3
47.5°	2586.1	2594.4	2617.7	2635.7	2655.8	2662.9	2680.3	2672.5	2680.3	2669.3	2667.4
50°	2846.8	2861.6	2881.6	2902.3	2923.6	2935.2	2957.8	2948.1	2958.4	2948.1	2942.3
52.5°	3103.7	3107.5	3151.4	3181.7	3211.4	3225.0	3238.5	3234.0	3234.7	3234.0	3228.2
55°	3347.6	3356.6	3400.5	3441.8	3493.5	3531.5	3554.8	3552.2	3546.4	3540.6	3530.9
57.5°	3622.5	3631.6	3681.9	3732.9	3791.6	3845.8	3893.0	3941.4	3960.1	3965.2	3943.9
60°	3994.3	3993.6	4060.8	4122.7	4206.6	4287.3	4390.5	4495.7	4616.4	4672.6	4598.4
62.5°	4372.5	4388.0	4484.8	4594.5	4767.5	4935.9	5126.3	5313.4	5504.5	5660.0	5494.8
65°	4327.3	4386.7	4530.6	4779.1	5098.5	5478.0	5888.5	6322.8	6715.2	6985.0	6682.3
67.5°	3750.3	3834.9	3981.4	4283.4	4682.9	5230.2	5919.5	6778.5	7776.9	8259.6	7661.4
70°	2718.4	2813.9	2967.5	3262.4	3658.0	4178.2	4926.9	5958.2	7279.9	7766.6	7107.6
72.5°	1352.7	1404.4	1499.2	1687.0	1986.5	2408.6	3087.5	4078.8	5248.3	5694.9	5092.7
75°	459.5	483.4	499.5	560.8	655.7	821.6	1159.1	1783.2	2720.3	3261.1	2681.6
77.5°	265.3	265.9	276.9	287.8	304.0	322.0	367.2	482.1	833.8	1184.3	862.9
80°	171.7	171.0	180.1	188.5	199.4	208.5	211.0	223.3	257.5	305.3	273.0
82.5°	89.1	100.0	120.0	131.0	151.7	155.5	150.4	145.9	154.2	160.1	163.9
85°	49.0	42.6	63.9	82.6	91.6	92.9	92.9	87.8	91.0	89.1	96.8
87.5°	22.6	20.7	25.2	40.7	43.2	36.8	38.7	34.2	24.5	23.9	27.1
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5
2.5°	1392.1	1392.7	1392.7	1394.7	1395.3	1396.6	1397.9	1398.5
5°	1381.1	1383.1	1381.8	1383.7	1383.7	1385.0	1385.0	1385.6
7.5°	1365.0	1366.9	1366.9	1366.9	1366.3	1368.2	1368.2	1368.2
10°	1348.2	1349.5	1348.9	1347.6	1346.3	1348.2	1347.6	1346.9
12.5°	1343.0	1339.8	1337.2	1335.9	1333.4	1334.0	1332.1	1332.1
15°	1346.3	1340.5	1335.9	1334.0	1331.4	1330.1	1328.8	1329.5
17.5°	1354.7	1347.6	1341.8	1338.5	1335.3	1333.4	1330.8	1331.4
20°	1369.5	1361.1	1352.7	1346.3	1340.5	1337.2	1335.3	1334.7
22.5°	1391.4	1379.2	1366.9	1357.2	1349.5	1345.0	1343.0	1341.8
25°	1416.6	1403.1	1388.9	1377.9	1370.2	1364.3	1360.5	1360.5
27.5°	1448.2	1437.3	1424.4	1411.5	1404.4	1398.5	1396.0	1394.7
30°	1501.2	1490.8	1480.5	1468.2	1459.2	1453.4	1448.9	1445.0
32.5°	1568.9	1560.5	1552.1	1543.1	1534.7	1527.0	1519.9	1516.7
35°	1664.4	1658.0	1652.2	1641.9	1638.6	1634.1	1630.2	1627.0
37.5°	1796.1	1793.5	1793.5	1782.6	1780.0	1778.0	1774.2	1774.8
40°	1969.1	1971.6	1968.4	1964.5	1962.6	1957.4	1957.4	1962.0
42.5°	2173.7	2175.6	2182.7	2176.2	2183.3	2176.9	2173.0	2176.2
45°	2411.2	2418.3	2432.5	2426.0	2430.5	2419.5	2406.0	2406.6
47.5°	2677.7	2684.2	2690.0	2685.4	2686.1	2668.0	2649.9	2645.4
50°	2954.6	2957.1	2960.4	2953.9	2955.2	2935.2	2914.6	2915.2
52.5°	3228.2	3240.5	3253.4	3236.0	3232.1	3209.5	3180.5	3168.8
55°	3541.2	3558.6	3543.8	3513.5	3483.1	3452.8	3414.7	3408.3
57.5°	3927.2	3897.5	3851.0	3793.6	3751.6	3709.0	3670.3	3654.2
60°	4464.1	4352.5	4268.6	4183.4	4129.8	4077.5	4026.6	4018.8
62.5°	5223.1	5030.1	4863.0	4686.8	4542.9	4430.6	4340.9	4315.7
65°	6174.4	5718.1	5322.5	4953.3	4632.6	4390.5	4238.2	4171.1
67.5°	6583.6	5682.6	5004.3	4480.3	4060.8	3767.8	3603.2	3521.2
70°	5785.2	4712.6	3974.9	3450.2	3068.2	2755.8	2606.7	2518.9
72.5°	3980.1	2997.8	2370.5	1934.9	1629.6	1368.2	1265.0	1257.2
75°	1787.1	1183.6	815.8	628.6	529.2	460.2	438.9	422.7
77.5°	500.2	369.8	329.8	308.5	287.8	264.0	254.9	256.9
80°	243.3	229.8	220.7	207.2	188.5	168.4	159.4	163.3
82.5°	161.3	159.4	165.2	155.5	128.4	109.1	91.6	83.9
85°	98.1	99.4	101.3	102.0	86.5	60.7	41.3	46.5
87.5°	38.7	44.5	48.4	50.3	47.1	29.0	23.2	23.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)