

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: P190820

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190820
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-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 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: 14356.1 lumens
Efficiency: N/A
Efficacy: 111.3 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

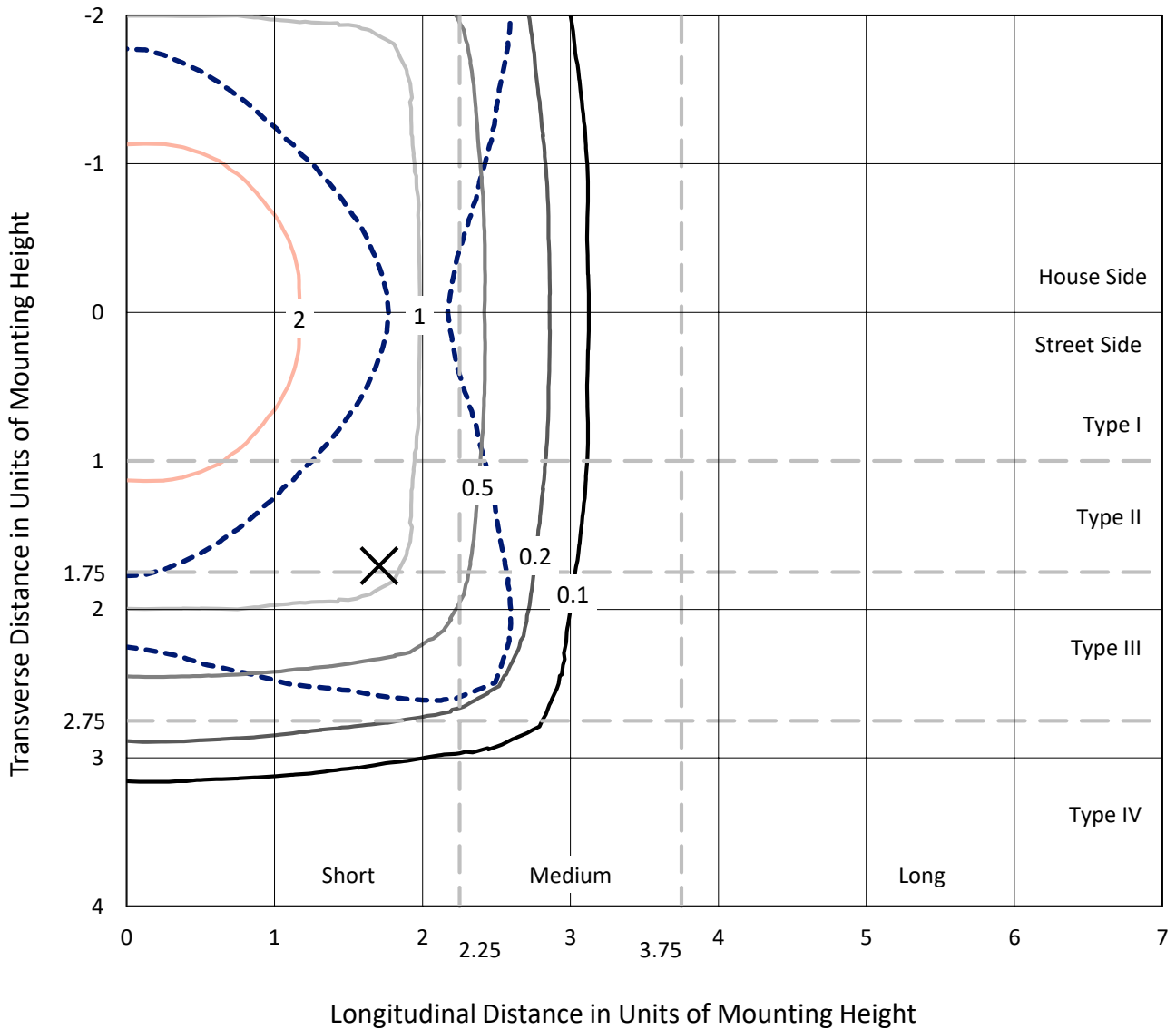
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

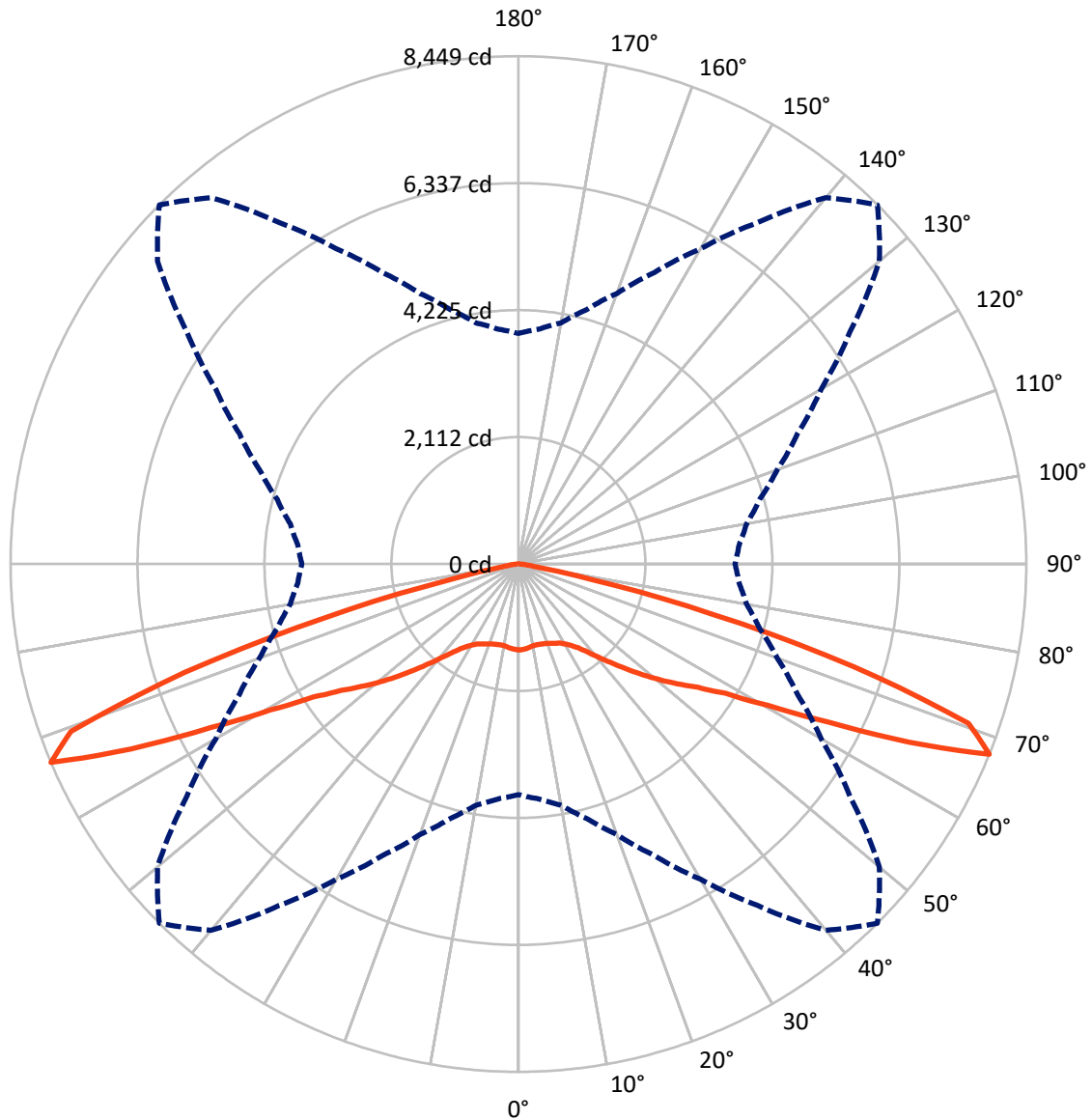
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.6 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	7178.0	0.0	7178.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7178.0	0.0	7178.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	14356.1	0.0	14356.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	0.9
10°-20°	388.6	2.7
20°-30°	660.5	4.6
30°-40°	1079.8	7.5
40°-50°	1927.6	13.4
50°-60°	3250.0	22.6
60°-70°	5043.5	35.1
70°-80°	1772.1	12.3
80°-90°	100.1	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°	14356.1	100.0
0°-180°	14356.1	100.0

Coefficient of Utilization



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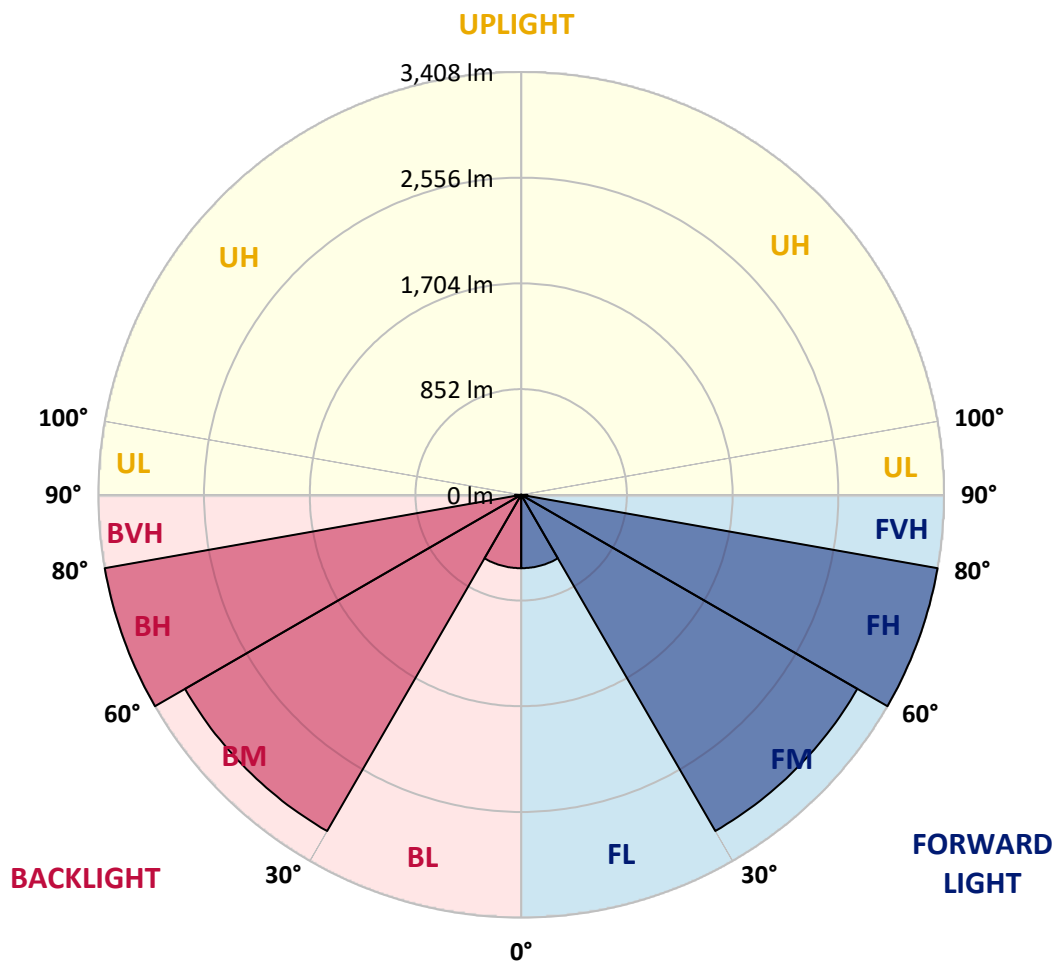
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	591.5	4.1			
FM	(30°-60°)	3128.7	21.8			
FH	(60°-80°)	3407.8	23.7			G2/5000
FVH	(80°-90°)	50.1	0.3			G1/100
BL	(0°-30°)	591.5	4.1	B2/1000		
BM	(30°-60°)	3128.7	21.8	B3/5000		
BH	(60°-80°)	3407.8	23.7	B4/5000		G2/5000
BVH	(80°-90°)	50.1	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°	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1425.4	1426.7	1426.7	1426.7	1426.0	1426.0	1424.7	1426.0	1425.4	1423.3	1424.0
5°	1413.5	1414.8	1414.8	1414.1	1416.1	1415.5	1413.5	1414.8	1414.1	1412.8	1413.5
7.5°	1396.3	1398.3	1398.3	1397.7	1399.6	1399.0	1397.7	1398.3	1398.3	1396.3	1396.3
10°	1377.2	1378.5	1378.5	1377.8	1381.1	1381.1	1380.5	1382.4	1383.1	1381.1	1379.9
12.5°	1359.3	1361.3	1361.3	1364.0	1367.3	1368.6	1371.9	1374.5	1377.2	1376.5	1373.8
15°	1348.8	1350.1	1352.8	1356.0	1361.3	1365.9	1371.3	1377.2	1382.4	1383.7	1379.9
17.5°	1342.2	1344.2	1348.1	1352.8	1360.0	1367.9	1375.9	1383.7	1391.0	1393.7	1389.1
20°	1340.2	1341.5	1345.5	1353.4	1363.3	1375.2	1386.4	1395.6	1405.5	1408.8	1405.5
22.5°	1344.2	1346.8	1351.4	1360.6	1373.8	1389.1	1402.3	1414.8	1427.3	1433.3	1428.7
25°	1362.0	1364.6	1370.5	1382.4	1396.9	1412.8	1428.0	1442.6	1453.7	1459.6	1456.4
27.5°	1395.0	1398.3	1405.5	1417.4	1433.3	1450.4	1466.9	1478.9	1488.1	1490.0	1486.1
30°	1444.5	1451.8	1460.4	1473.6	1492.1	1506.6	1523.1	1533.6	1544.9	1544.9	1541.6
32.5°	1521.7	1529.0	1538.2	1550.8	1565.3	1581.2	1595.7	1604.9	1616.8	1617.5	1609.5
35°	1637.3	1640.6	1648.5	1656.5	1669.7	1683.5	1696.1	1702.0	1711.9	1712.5	1705.3
37.5°	1789.8	1790.5	1795.7	1798.3	1810.2	1825.5	1837.3	1841.3	1850.5	1849.2	1841.9
40°	1967.3	1970.7	1972.7	1976.6	1989.1	2003.7	2016.2	2018.2	2028.1	2026.2	2016.8
42.5°	2172.7	2174.0	2185.2	2191.2	2203.0	2210.3	2226.1	2228.2	2240.1	2234.7	2224.2
45°	2403.1	2415.0	2425.5	2437.5	2450.0	2458.6	2471.1	2468.5	2476.4	2468.5	2462.5
47.5°	2645.5	2653.9	2677.8	2696.2	2716.8	2724.0	2741.8	2733.8	2741.8	2730.6	2728.6
50°	2912.1	2927.3	2947.7	2968.9	2990.7	3002.6	3025.7	3015.8	3026.3	3015.8	3009.8
52.5°	3174.9	3178.8	3223.7	3254.7	3285.1	3299.0	3312.8	3308.2	3308.9	3308.2	3302.3
55°	3424.4	3433.6	3478.5	3520.8	3573.7	3612.6	3636.4	3633.7	3627.8	3621.9	3611.9
57.5°	3705.6	3714.9	3766.4	3818.6	3878.6	3934.1	3982.3	4031.9	4051.0	4056.2	4034.4
60°	4086.0	4085.3	4154.0	4217.3	4303.1	4385.7	4491.3	4598.9	4722.4	4779.8	4703.9
62.5°	4472.9	4488.7	4587.7	4699.9	4876.9	5049.2	5244.0	5435.3	5630.8	5789.9	5620.9
65°	4426.6	4487.4	4634.6	4888.8	5215.5	5603.7	6023.6	6467.9	6869.3	7145.3	6835.7
67.5°	3836.4	3922.9	4072.8	4381.7	4790.4	5350.2	6055.4	6934.1	7955.4	8449.2	7837.2
70°	2780.8	2878.5	3035.6	3337.3	3742.0	4274.1	5040.0	6094.9	7447.0	7944.8	7270.7
72.5°	1383.7	1436.6	1533.6	1725.7	2032.1	2463.9	3158.4	4172.4	5368.8	5825.6	5209.6
75°	470.0	494.5	511.0	573.7	670.7	840.5	1185.7	1824.1	2782.7	3335.9	2743.1
77.5°	271.4	272.0	283.3	294.4	311.0	329.4	375.6	493.2	852.9	1211.5	882.7
80°	175.6	174.9	184.2	192.8	204.0	213.3	215.8	228.4	263.4	312.3	279.3
82.5°	91.1	102.3	122.8	134.0	155.2	159.1	153.9	149.2	157.7	163.8	167.7
85°	50.1	43.6	65.4	84.5	93.7	95.0	95.0	89.8	93.1	91.1	99.0
87.5°	23.1	21.2	25.8	41.6	44.2	37.6	39.6	35.0	25.1	24.4	27.7
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°	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1424.0	1424.7	1424.7	1426.7	1427.3	1428.7	1430.0	1430.6
5°	1412.8	1414.8	1413.5	1415.5	1415.5	1416.8	1416.8	1417.4
7.5°	1396.3	1398.3	1398.3	1398.3	1397.7	1399.6	1399.6	1399.6
10°	1379.1	1380.5	1379.9	1378.5	1377.2	1379.1	1378.5	1377.8
12.5°	1373.8	1370.5	1367.9	1366.6	1364.0	1364.6	1362.7	1362.7
15°	1377.2	1371.3	1366.6	1364.6	1362.0	1360.6	1359.3	1360.0
17.5°	1385.8	1378.5	1372.6	1369.2	1365.9	1364.0	1361.3	1362.0
20°	1400.9	1392.3	1383.7	1377.2	1371.3	1367.9	1365.9	1365.3
22.5°	1423.3	1410.9	1398.3	1388.3	1380.5	1375.9	1373.8	1372.6
25°	1449.1	1435.3	1420.8	1409.5	1401.6	1395.6	1391.7	1391.7
27.5°	1481.4	1470.3	1457.1	1443.9	1436.6	1430.6	1428.0	1426.7
30°	1535.7	1525.0	1514.5	1501.9	1492.7	1486.8	1482.2	1478.2
32.5°	1604.9	1596.3	1587.7	1578.5	1569.9	1562.0	1554.8	1551.5
35°	1702.6	1696.1	1690.1	1679.6	1676.2	1671.6	1667.6	1664.3
37.5°	1837.3	1834.7	1834.7	1823.5	1820.9	1818.8	1814.9	1815.5
40°	2014.3	2016.8	2013.6	2009.6	2007.6	2002.3	2002.3	2007.0
42.5°	2223.6	2225.5	2232.8	2226.1	2233.4	2226.9	2222.9	2226.1
45°	2466.5	2473.8	2488.3	2481.7	2486.3	2475.0	2461.2	2461.8
47.5°	2739.2	2745.8	2751.7	2747.0	2747.7	2729.2	2710.7	2706.1
50°	3022.4	3025.0	3028.3	3021.7	3023.0	3002.6	2981.5	2982.1
52.5°	3302.3	3314.9	3328.1	3310.3	3306.3	3283.2	3253.5	3241.5
55°	3622.5	3640.3	3625.1	3594.1	3563.0	3532.0	3493.1	3486.5
57.5°	4017.3	3987.0	3939.4	3880.7	3837.7	3794.1	3754.5	3738.1
60°	4566.6	4452.4	4366.6	4279.4	4224.6	4171.1	4119.0	4111.0
62.5°	5343.0	5145.5	4974.6	4794.4	4647.2	4532.3	4440.5	4414.7
65°	6316.1	5849.3	5444.7	5067.0	4738.9	4491.3	4335.5	4266.8
67.5°	6734.7	5813.0	5119.2	4583.1	4154.0	3854.3	3685.9	3602.0
70°	5918.0	4820.8	4066.1	3529.4	3138.6	2819.0	2666.5	2576.7
72.5°	4071.4	3066.6	2424.9	1979.3	1667.0	1399.6	1294.0	1286.1
75°	1828.1	1210.8	834.5	643.0	541.3	470.8	449.0	432.4
77.5°	511.7	378.3	337.4	315.6	294.4	270.1	260.8	262.8
80°	248.9	235.1	225.8	212.0	192.8	172.3	163.1	167.0
82.5°	165.0	163.1	169.0	159.1	131.3	111.6	93.7	85.8
85°	100.4	101.7	103.6	104.3	88.5	62.1	42.2	47.6
87.5°	39.6	45.5	49.5	51.5	48.2	29.7	23.7	24.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)