

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: P299701

Luminaire Tested: **GLNA-AF-02-LED-E1-5MQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299701
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: GLNA-AF-02-LED-E1-5MQ-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7297.5 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 66
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

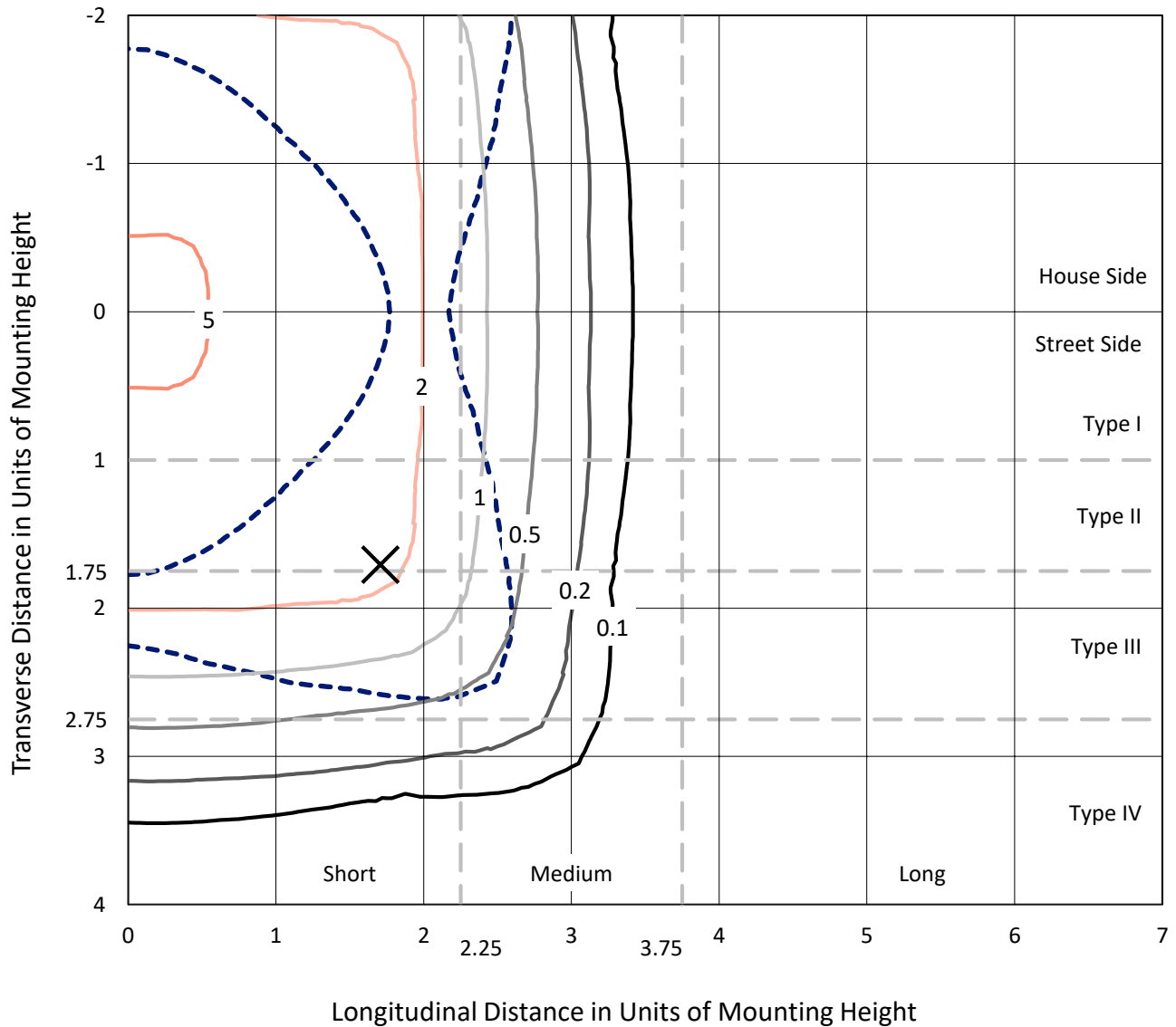


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

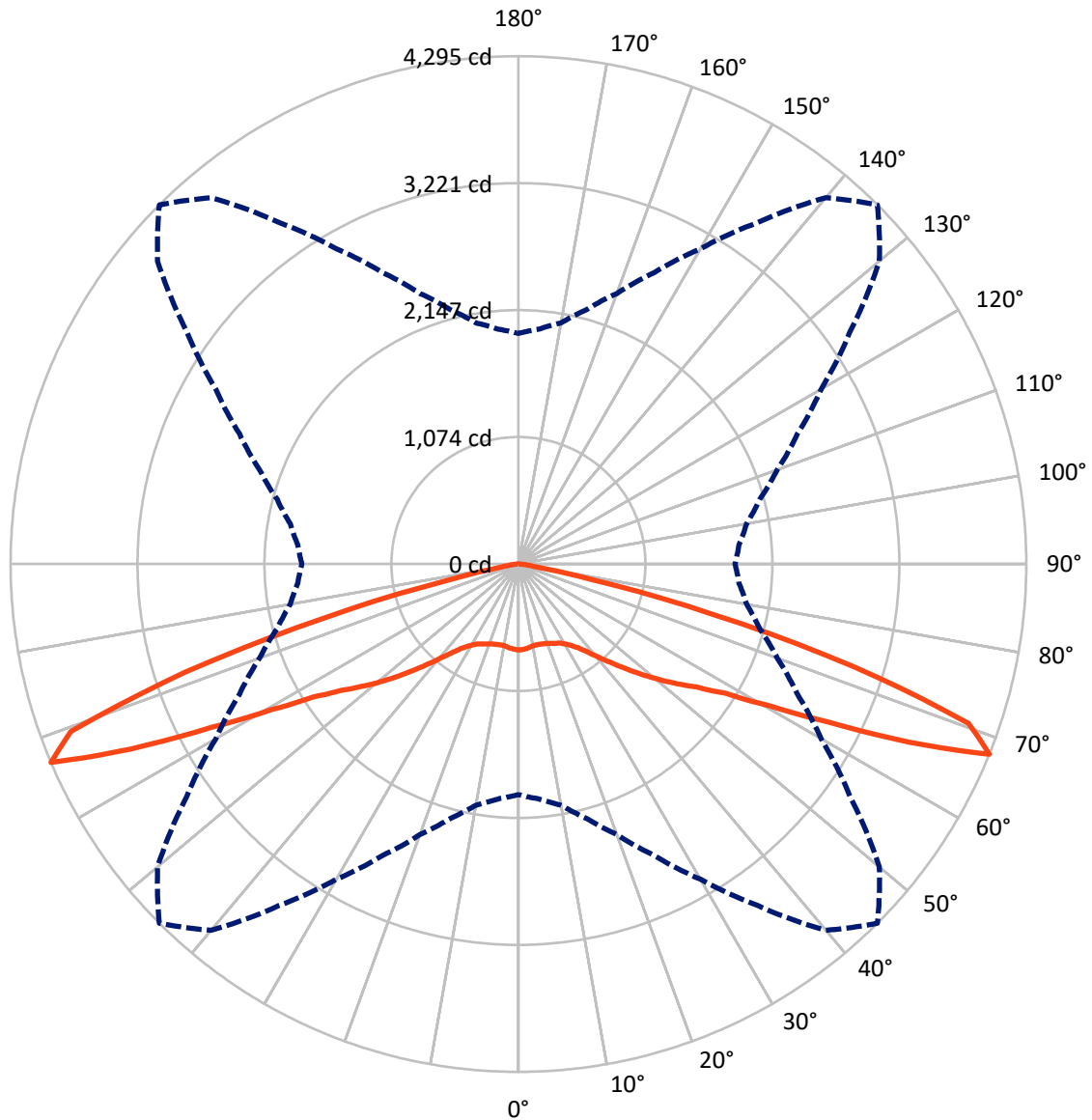


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type V - Short - Full Cutoff

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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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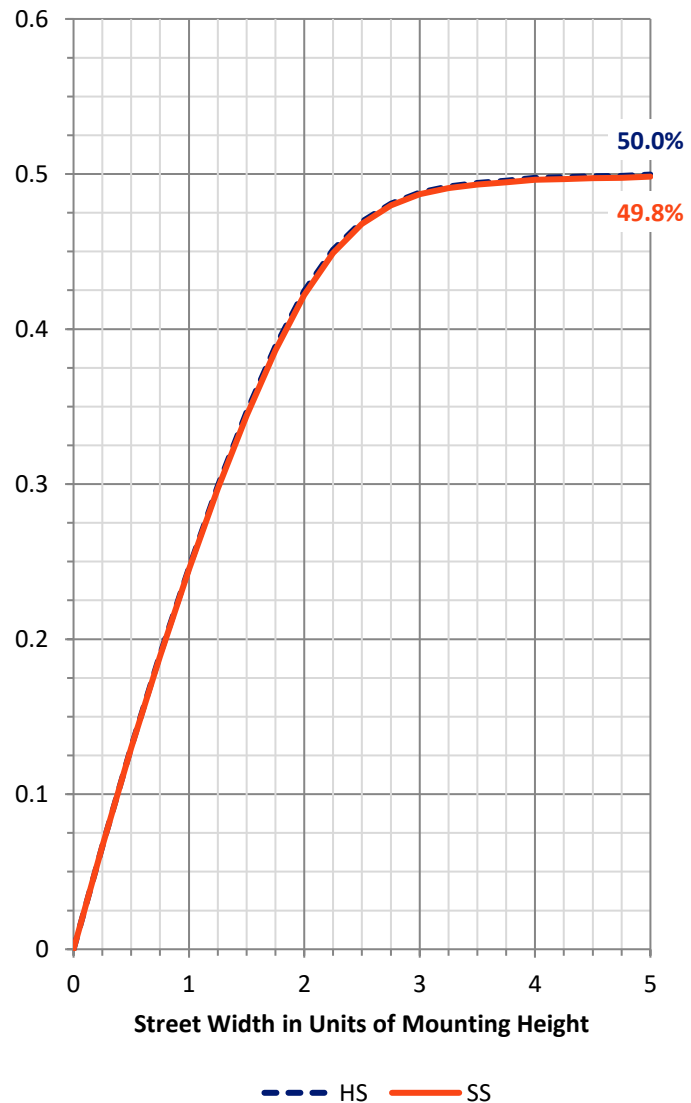
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3648.7	0.0	3648.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3648.7	0.0	3648.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	7297.5	0.0	7297.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	0.9
10°-20°	197.5	2.7
20°-30°	335.8	4.6
30°-40°	548.9	7.5
40°-50°	979.8	13.4
50°-60°	1652.0	22.6
60°-70°	2563.7	35.1
70°-80°	900.8	12.3
80°-90°	50.9	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°	7297.5	100.0
0°-180°	7297.5	100.0



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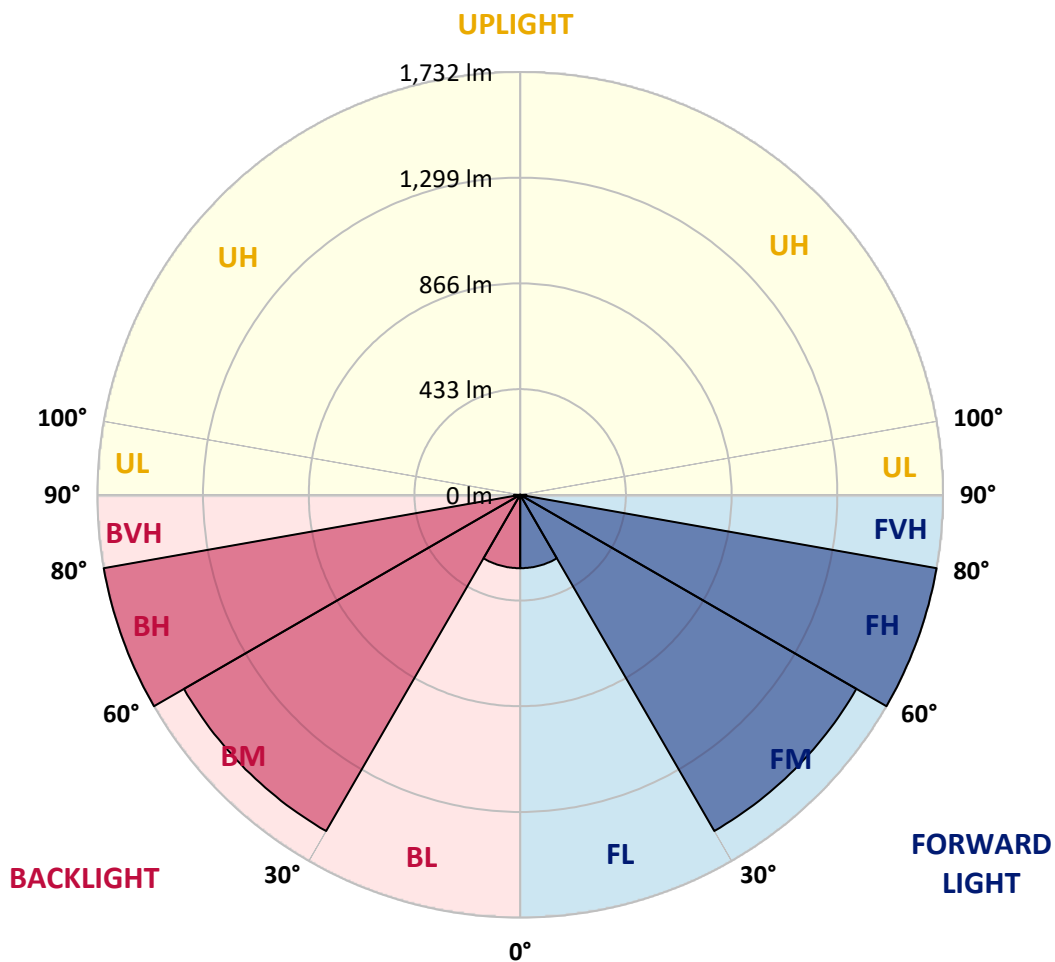
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	300.7	4.1			
FM	(30°-60°)	1590.4	21.8			
FH	(60°-80°)	1732.2	23.7			G1/1800
FVH	(80°-90°)	25.5	0.3			G1/100
BL	(0°-30°)	300.7	4.1	B1/500		
BM	(30°-60°)	1590.4	21.8	B2/2500		
BH	(60°-80°)	1732.2	23.7	B3/2500		G1/1800
BVH	(80°-90°)	25.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	724.5	725.2	725.2	725.2	724.9	724.9	724.2	724.9	724.5	723.5	723.9
5°	718.5	719.2	719.2	718.8	719.8	719.5	718.5	719.2	718.8	718.2	718.5
7.5°	709.8	710.8	710.8	710.4	711.5	711.1	710.4	710.8	710.8	709.8	709.8
10°	700.0	700.7	700.7	700.4	702.1	702.1	701.7	702.7	703.1	702.1	701.4
12.5°	691.0	692.0	692.0	693.3	695.0	695.7	697.4	698.7	700.0	699.7	698.4
15°	685.6	686.3	687.6	689.3	692.0	694.3	697.0	700.0	702.7	703.4	701.4
17.5°	682.3	683.3	685.3	687.6	691.3	695.3	699.4	703.4	707.1	708.4	706.1
20°	681.2	681.9	683.9	688.0	693.0	699.0	704.7	709.4	714.5	716.2	714.5
22.5°	683.3	684.6	687.0	691.7	698.4	706.1	712.8	719.2	725.5	728.6	726.2
25°	692.3	693.7	696.7	702.7	710.1	718.2	725.9	733.3	739.0	742.0	740.3
27.5°	709.1	710.8	714.5	720.5	728.6	737.3	745.7	751.7	756.4	757.4	755.4
30°	734.3	738.0	742.3	749.0	758.4	765.8	774.2	779.6	785.3	785.3	783.6
32.5°	773.5	777.2	781.9	788.3	795.7	803.7	811.1	815.8	821.9	822.2	818.2
35°	832.3	833.9	838.0	842.0	848.7	855.8	862.1	865.2	870.2	870.5	866.8
37.5°	909.8	910.1	912.8	914.2	920.2	927.9	933.9	936.0	940.7	940.0	936.3
40°	1000.1	1001.7	1002.7	1004.8	1011.1	1018.5	1024.9	1025.9	1030.9	1029.9	1025.2
42.5°	1104.4	1105.1	1110.8	1113.8	1119.9	1123.6	1131.6	1132.6	1138.7	1136.0	1130.6
45°	1221.6	1227.6	1233.0	1239.0	1245.4	1249.7	1256.1	1254.8	1258.8	1254.8	1251.8
47.5°	1344.7	1349.1	1361.2	1370.6	1381.0	1384.6	1393.7	1389.7	1393.7	1388.0	1387.0
50°	1480.3	1488.0	1498.4	1509.2	1520.2	1526.3	1538.0	1533.0	1538.3	1533.0	1530.0
52.5°	1613.9	1615.9	1638.7	1654.5	1669.9	1676.9	1684.0	1681.6	1682.0	1681.6	1678.6
55°	1740.7	1745.4	1768.2	1789.7	1816.6	1836.4	1848.4	1847.1	1844.1	1841.1	1836.0
57.5°	1883.7	1888.4	1914.5	1941.1	1971.6	1999.8	2024.3	2049.5	2059.2	2061.9	2050.8
60°	2077.0	2076.6	2111.5	2143.8	2187.4	2229.3	2283.0	2337.7	2400.5	2429.7	2391.1
62.5°	2273.6	2281.7	2332.0	2389.1	2479.0	2566.6	2665.6	2762.9	2862.3	2943.1	2857.2
65°	2250.1	2281.0	2355.8	2485.1	2651.2	2848.5	3061.9	3287.8	3491.8	3632.1	3474.7
67.5°	1950.1	1994.1	2070.3	2227.3	2435.0	2719.6	3078.0	3524.7	4043.9	4294.9	3983.8
70°	1413.5	1463.2	1543.0	1696.4	1902.1	2172.6	2561.9	3098.2	3785.5	4038.5	3695.9
72.5°	703.4	730.2	779.6	877.2	1032.9	1252.4	1605.5	2120.9	2729.0	2961.3	2648.1
75°	238.9	251.4	259.7	291.6	341.0	427.2	602.7	927.2	1414.5	1695.7	1394.4
77.5°	137.9	138.3	144.0	149.7	158.1	167.5	191.0	250.7	433.6	615.8	448.7
80°	89.3	88.9	93.6	98.0	103.7	108.4	109.7	116.1	133.9	158.7	142.0
82.5°	46.3	52.0	62.4	68.1	78.9	80.9	78.2	75.8	80.2	83.2	85.2
85°	25.5	22.1	33.2	43.0	47.7	48.3	48.3	45.6	47.3	46.3	50.3
87.5°	11.7	10.7	13.1	21.1	22.5	19.1	20.1	17.8	12.8	12.4	14.1
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°	727.2	727.2	727.2	727.2	727.2	727.2	727.2	727.2
2.5°	723.9	724.2	724.2	725.2	725.5	726.2	726.9	727.2
5°	718.2	719.2	718.5	719.5	719.5	720.2	720.2	720.5
7.5°	709.8	710.8	710.8	710.8	710.4	711.5	711.5	711.5
10°	701.0	701.7	701.4	700.7	700.0	701.0	700.7	700.4
12.5°	698.4	696.7	695.3	694.7	693.3	693.7	692.7	692.7
15°	700.0	697.0	694.7	693.7	692.3	691.7	691.0	691.3
17.5°	704.4	700.7	697.7	696.0	694.3	693.3	692.0	692.3
20°	712.1	707.8	703.4	700.0	697.0	695.3	694.3	694.0
22.5°	723.5	717.2	710.8	705.7	701.7	699.4	698.4	697.7
25°	736.6	729.6	722.2	716.5	712.5	709.4	707.4	707.4
27.5°	753.1	747.4	740.6	733.9	730.2	727.2	725.9	725.2
30°	780.6	775.2	769.8	763.5	758.8	755.8	753.4	751.4
32.5°	815.8	811.5	807.1	802.4	798.0	794.0	790.3	788.6
35°	865.5	862.1	859.1	853.7	852.1	849.7	847.7	846.0
37.5°	933.9	932.6	932.6	926.9	925.6	924.6	922.5	922.9
40°	1023.9	1025.2	1023.6	1021.5	1020.5	1017.8	1017.8	1020.2
42.5°	1130.3	1131.3	1135.0	1131.6	1135.3	1131.9	1129.9	1131.6
45°	1253.8	1257.5	1264.8	1261.5	1263.8	1258.1	1251.1	1251.4
47.5°	1392.4	1395.7	1398.7	1396.4	1396.7	1387.3	1377.9	1375.6
50°	1536.3	1537.7	1539.4	1536.0	1536.7	1526.3	1515.5	1515.9
52.5°	1678.6	1685.0	1691.7	1682.7	1680.6	1668.9	1653.8	1647.8
55°	1841.4	1850.4	1842.7	1827.0	1811.2	1795.4	1775.6	1772.3
57.5°	2042.1	2026.6	2002.5	1972.6	1950.8	1928.6	1908.5	1900.1
60°	2321.3	2263.2	2219.6	2175.3	2147.4	2120.3	2093.8	2089.7
62.5°	2715.9	2615.6	2528.7	2437.1	2362.2	2303.8	2257.2	2244.1
65°	3210.6	2973.3	2767.6	2575.7	2408.9	2283.0	2203.8	2168.9
67.5°	3423.4	2954.9	2602.2	2329.7	2111.5	1959.2	1873.6	1831.0
70°	3008.2	2450.5	2066.9	1794.1	1595.4	1433.0	1355.5	1309.8
72.5°	2069.6	1558.8	1232.6	1006.1	847.4	711.5	657.8	653.7
75°	929.3	615.5	424.2	326.9	275.2	239.3	228.2	219.8
77.5°	260.1	192.3	171.5	160.4	149.7	137.3	132.6	133.6
80°	126.5	119.5	114.8	107.7	98.0	87.6	82.9	84.9
82.5°	83.9	82.9	85.9	80.9	66.8	56.7	47.7	43.6
85°	51.0	51.7	52.7	53.0	45.0	31.5	21.5	24.2
87.5°	20.1	23.2	25.2	26.2	24.5	15.1	12.1	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)