

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: P647401

Luminaire Tested: **GALN-SA4D-835-U-T2R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P647401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-835-U-T2R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15847.9 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G1

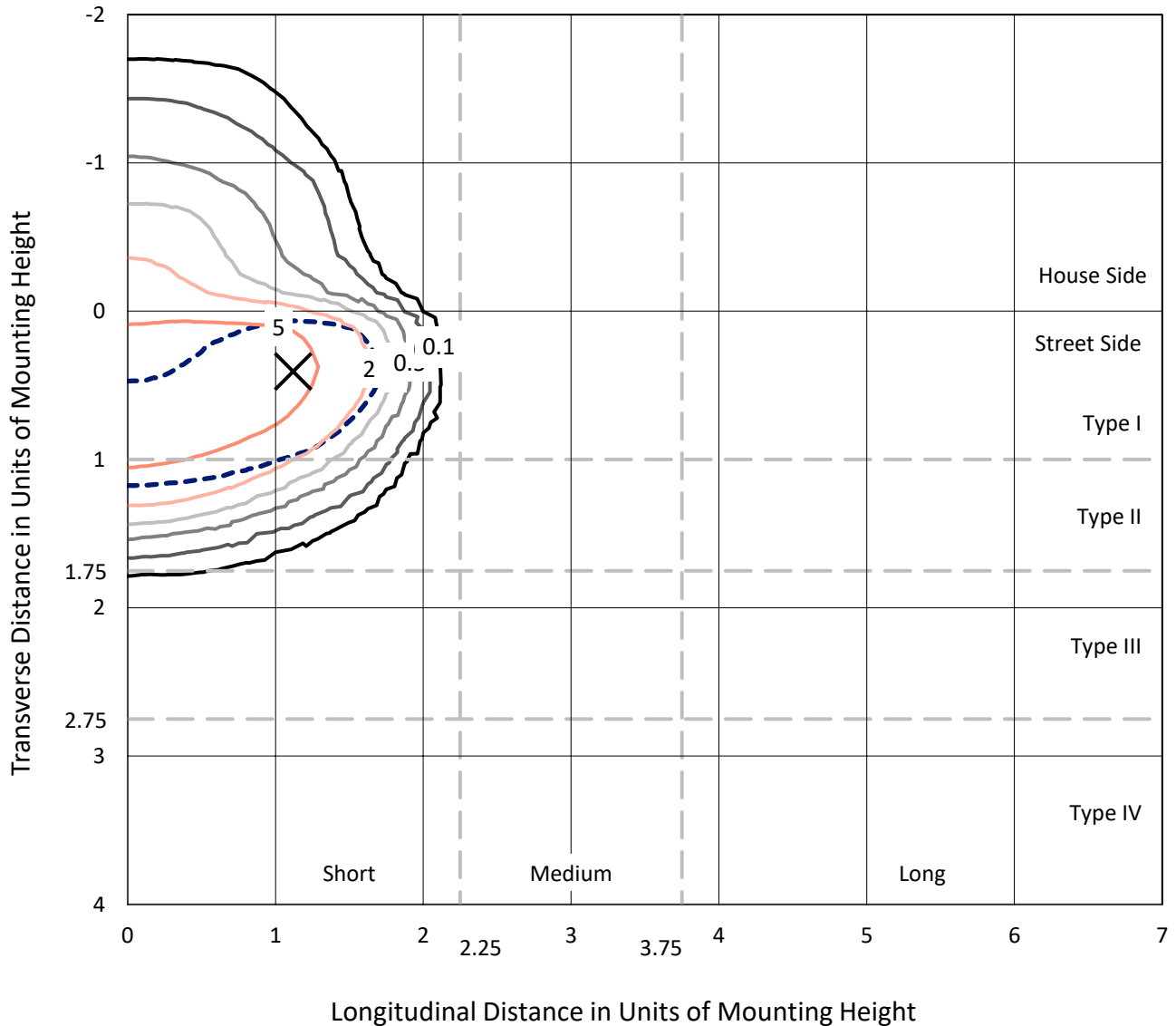
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P647401
 CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

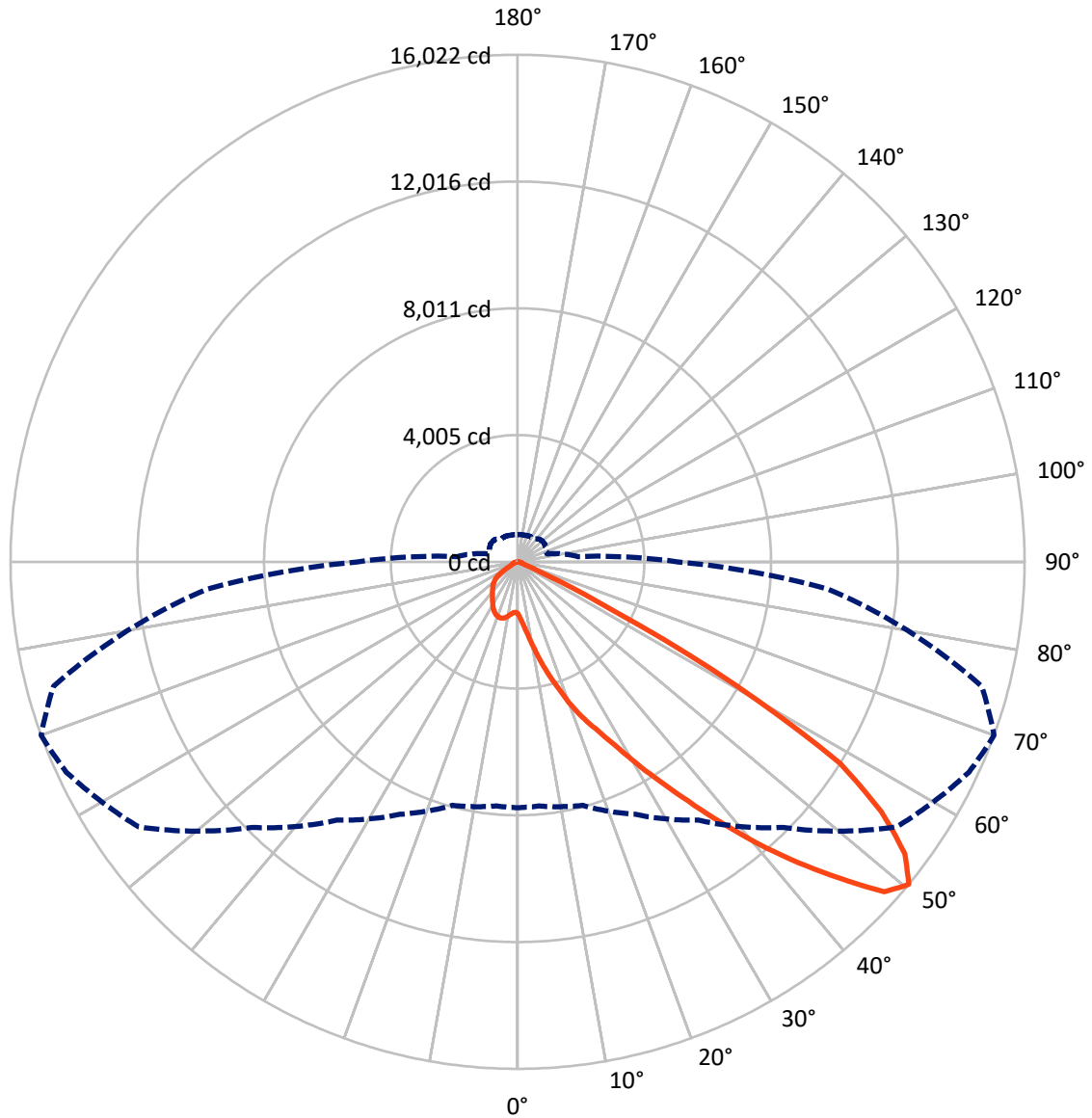
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type I - Short - N/A

REPORT NUMBER: P647401
CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P647401
 CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

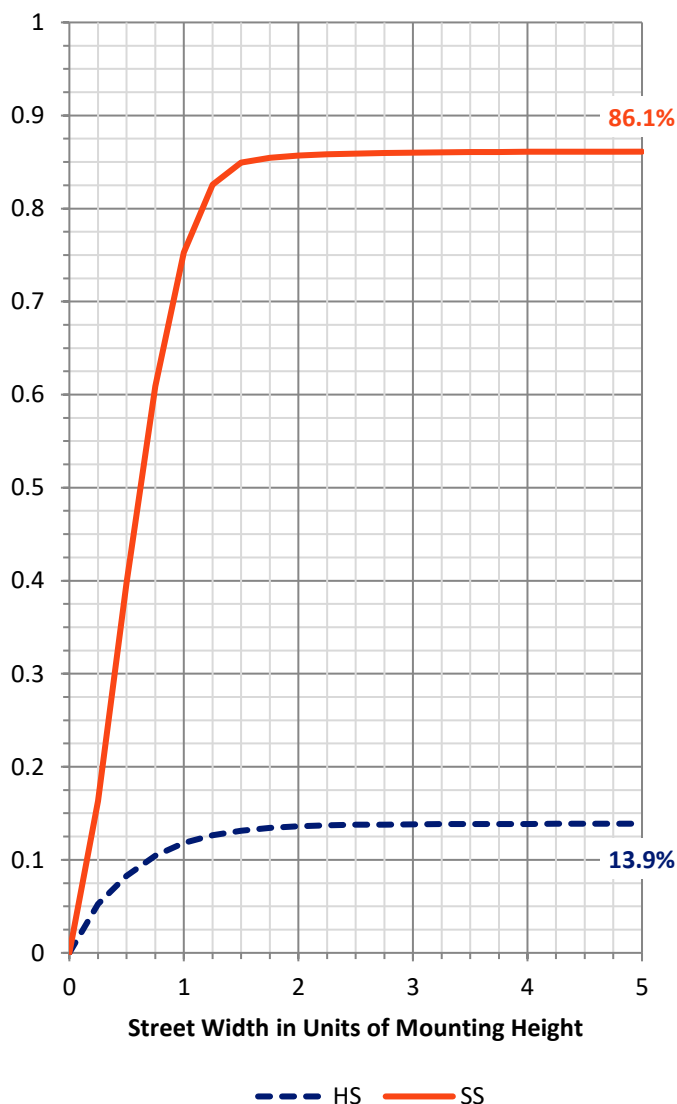
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2213.3	0.0	2213.3
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	13634.7	0.0	13634.7
	% Fixture	86.0	0.0	86.0
Total	Lumens	15847.9	0.0	15847.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.5	1.3
10°-20°	923.3	5.8
20°-30°	1937.0	12.2
30°-40°	3338.8	21.1
40°-50°	4879.6	30.8
50°-60°	3800.4	24.0
60°-70°	643.9	4.1
70°-80°	88.5	0.6
80°-90°	22.9	0.1
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°	15847.9	100.0
0°-180°	15847.9	100.0

Coefficient of Utilization



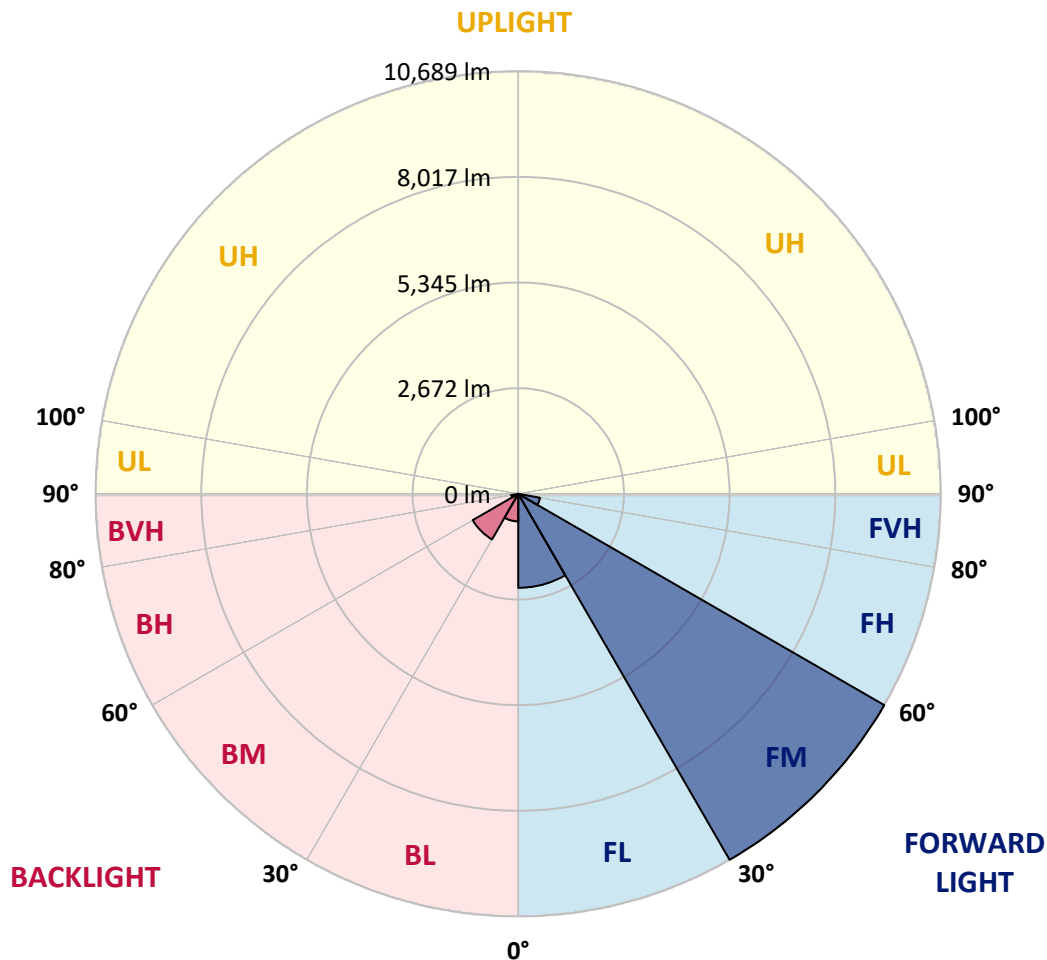
REPORT NUMBER: P647401
 CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2377.4	15.0			
FM (30°-60°)	10689.2	67.4			
FH (60°-80°)	557.5	3.5			G0/660
FVH (80°-90°)	10.6	0.1			G1/100
BL (0°-30°)	696.5	4.4	B2/1000		
BM (30°-60°)	1329.7	8.4	B2/2500		
BH (60°-80°)	174.8	1.1	B1/500		G1/500
BVH (80°-90°)	12.3	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type I Short





REPORT NUMBER: P647401

CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6
2.5°	2149.6	2134.0	2100.1	2037.6	2011.5	1949.0	1912.5	1842.2	1797.8	1748.4	1693.6
5°	3027.7	2947.0	2897.4	2827.1	2621.2	2493.5	2282.5	2102.7	2019.4	1928.1	1803.1
7.5°	3934.5	3882.3	3814.6	3663.5	3522.8	3257.0	2894.8	2498.8	2329.4	2173.1	1925.6
10°	4684.8	4539.0	4531.1	4419.1	4265.4	3947.5	3512.4	3019.9	2717.6	2488.4	2100.1
12.5°	5208.6	5075.7	5135.6	5122.6	4979.3	4687.5	4184.6	3533.2	3217.9	2860.9	2279.9
15°	5685.4	5630.7	5612.5	5596.8	5539.5	5323.2	4872.5	4158.5	3702.6	3272.6	2483.1
17.5°	6151.9	6011.2	6078.9	6091.9	6086.7	5891.3	5469.2	4752.7	4215.9	3707.7	2696.8
20°	6566.2	6579.2	6487.9	6469.7	6454.1	6446.3	6034.6	5341.5	4846.5	4163.8	2975.6
22.5°	7097.7	7006.4	7087.2	7035.2	6933.5	6871.0	6555.7	5862.6	5393.6	4713.6	3259.6
25°	7725.6	7798.6	7608.4	7587.5	7475.5	7259.2	6975.2	6446.3	5919.9	5224.3	3567.1
27.5°	8499.5	8371.8	8322.3	8207.6	8004.5	7913.2	7579.7	7048.2	6555.7	5761.0	3864.1
30°	9163.9	9130.0	8882.5	8747.0	8569.9	8567.3	8100.8	7863.7	7384.3	6602.6	4273.2
32.5°	9705.9	9557.4	9466.2	9372.4	9229.1	9268.1	8874.7	8749.6	8267.6	7384.3	4755.2
35°	10068.0	9961.2	9906.5	9763.2	9721.5	9896.1	9731.9	9679.8	9283.8	8483.9	5320.6
37.5°	10182.7	10216.6	10206.2	10026.4	10115.0	10586.6	10797.6	10662.1	10453.7	9643.3	5932.9
40°	10284.3	10307.8	10255.7	10466.8	10719.5	11256.3	12019.7	11795.6	11717.4	10818.5	6785.0
42.5°	10341.6	10323.4	10323.4	10688.2	11071.2	12150.0	13200.0	13051.5	12991.5	12069.2	7769.9
45°	10094.1	9916.9	10107.1	10602.2	11373.5	12590.3	14143.3	14349.1	14263.1	13556.9	8921.6
47.5°	9169.2	9278.6	9385.4	10047.2	11006.1	12454.8	14721.7	15422.6	15581.5	14807.6	9677.3
50°	7769.9	7746.5	7968.0	8801.7	9966.4	11871.1	14609.6	15732.7	16021.9	15182.8	9836.2
52.5°	5651.5	5823.6	6063.2	6891.8	8272.8	10359.9	13163.6	14932.7	15318.4	14721.7	9731.9
55°	3290.9	3100.7	3640.0	4341.0	5643.7	7814.2	11128.5	13236.5	13950.4	13882.7	9205.6
57.5°	1318.4	1276.8	1461.8	1969.9	2944.3	4843.8	8093.0	10875.8	12019.7	12715.4	8090.4
60°	578.5	565.4	664.5	802.5	1203.8	2233.0	4426.9	6764.2	7957.6	8885.1	5568.1
62.5°	416.9	411.7	461.2	510.7	635.8	971.9	1860.4	2725.5	3397.8	4103.9	2493.5
65°	336.1	349.1	383.0	409.1	469.0	539.3	656.6	758.3	930.2	964.1	549.7
67.5°	273.6	284.0	315.3	344.0	354.4	291.8	302.2	265.8	265.8	237.1	190.2
70°	200.6	203.3	239.8	273.6	218.8	117.2	205.9	205.9	185.0	177.2	161.5
72.5°	148.5	151.1	179.8	169.4	86.0	73.0	151.1	166.8	151.1	143.3	130.3
75°	109.5	112.0	93.8	39.1	36.5	46.9	88.6	114.6	109.5	106.8	99.0
77.5°	20.8	15.7	13.0	18.2	26.1	39.1	57.3	70.3	73.0	78.1	73.0
80°	2.6	2.6	7.8	15.7	28.7	41.7	59.9	67.7	70.3	73.0	67.7
82.5°	0.0	2.6	7.8	15.7	28.7	39.1	52.1	59.9	65.1	67.7	65.1
85°	0.0	2.6	5.2	13.0	23.4	28.7	26.1	18.2	15.7	18.2	13.0
87.5°	0.0	0.0	2.6	2.6	5.2	5.2	5.2	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P647401

CATALOG NUMBER: GALN-SA4D-835-U-T2R-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6	1641.6
2.5°	1662.4	1652.0	1615.5	1576.4	1542.5	1558.2	1542.5	1529.5	1534.7	1529.5	1524.3
5°	1753.6	1706.7	1628.5	1594.7	1566.0	1563.3	1555.6	1552.9	1555.6	1555.6	1532.1
7.5°	1839.6	1764.0	1680.6	1644.1	1610.2	1612.9	1594.7	1594.7	1592.0	1579.0	1573.8
10°	1969.9	1868.2	1761.4	1696.2	1654.6	1646.7	1628.5	1610.2	1610.2	1610.2	1584.2
12.5°	2113.2	1985.5	1839.6	1764.0	1714.5	1675.4	1646.7	1641.6	1612.9	1607.7	1594.7
15°	2238.2	2076.7	1891.6	1787.4	1724.9	1672.8	1628.5	1599.8	1586.8	1579.0	1568.6
17.5°	2360.7	2154.8	1920.3	1787.4	1719.7	1659.8	1612.9	1586.8	1555.6	1560.8	1539.9
20°	2524.9	2238.2	1928.1	1753.6	1670.2	1612.9	1550.3	1537.3	1519.1	1503.4	1508.7
22.5°	2683.8	2298.2	1904.7	1711.9	1592.0	1524.3	1493.0	1477.4	1469.5	1456.5	1438.3
25°	2827.1	2363.3	1868.2	1636.3	1508.7	1459.1	1430.5	1427.9	1409.6	1409.6	1375.7
27.5°	2973.0	2386.7	1805.7	1547.8	1435.7	1407.1	1394.0	1388.8	1381.0	1362.7	1339.2
30°	3139.8	2394.6	1714.5	1456.5	1370.6	1339.2	1357.5	1370.6	1336.7	1302.8	1313.2
32.5°	3277.9	2376.3	1605.1	1370.6	1323.7	1308.0	1344.5	1357.5	1318.4	1281.9	1263.7
35°	3444.6	2332.0	1498.2	1302.8	1276.8	1308.0	1339.2	1339.2	1261.1	1216.8	1206.4
37.5°	3697.3	2282.5	1399.2	1245.5	1227.3	1292.4	1334.1	1305.4	1183.0	1128.2	1115.2
40°	3968.3	2251.3	1302.8	1188.1	1201.2	1266.3	1289.8	1201.2	1076.1	1042.3	1031.8
42.5°	4361.8	2188.7	1216.8	1138.6	1177.7	1229.9	1229.9	1070.9	1024.0	1005.8	1003.2
45°	4851.6	2144.4	1141.2	1097.0	1143.9	1156.9	1115.2	1003.2	969.3	964.1	966.7
47.5°	5091.4	2058.4	1063.1	1047.4	1081.3	1083.9	974.5	948.4	919.8	912.0	906.7
50°	5054.9	1904.7	961.4	982.4	1029.3	1003.2	888.5	893.7	867.6	865.1	852.1
52.5°	4799.6	1662.4	859.8	909.4	961.4	885.9	818.2	812.9	812.9	779.1	766.1
55°	4255.0	1339.2	737.4	799.9	862.5	745.2	726.9	721.8	708.7	677.5	669.6
57.5°	3369.0	982.4	555.0	622.7	732.2	633.1	630.5	607.1	573.2	549.7	549.7
60°	2003.7	565.4	349.1	380.4	484.7	513.3	570.7	560.2	502.9	466.4	456.0
62.5°	914.5	291.8	221.5	226.7	260.6	333.5	448.2	518.5	437.8	375.2	370.0
65°	307.5	216.3	182.4	174.6	179.8	200.6	268.4	367.4	349.1	289.2	278.8
67.5°	187.6	192.9	171.9	158.9	158.9	156.4	153.7	166.8	205.9	200.6	203.3
70°	161.5	177.2	158.9	143.3	138.1	130.3	109.5	91.2	78.1	91.2	96.4
72.5°	130.3	140.7	135.5	122.5	109.5	99.0	78.1	59.9	44.3	39.1	39.1
75°	96.4	104.2	109.5	93.8	83.4	70.3	57.3	39.1	23.4	15.7	15.7
77.5°	70.3	78.1	80.8	73.0	62.6	49.5	36.5	26.1	13.0	5.2	5.2
80°	59.9	70.3	78.1	73.0	65.1	46.9	33.9	18.2	10.4	2.6	2.6
82.5°	57.3	70.3	78.1	70.3	62.6	44.3	33.9	20.8	7.8	2.6	2.6
85°	13.0	18.2	23.4	28.7	33.9	33.9	26.1	15.7	7.8	2.6	2.6
87.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	2.6	2.6	0.0
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)