

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: P650866

Luminaire Tested: **GALN-SA4C-840-U-T2R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P650866
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-SA4C-840-U-T2R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1050mA 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: 15469.3 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G1

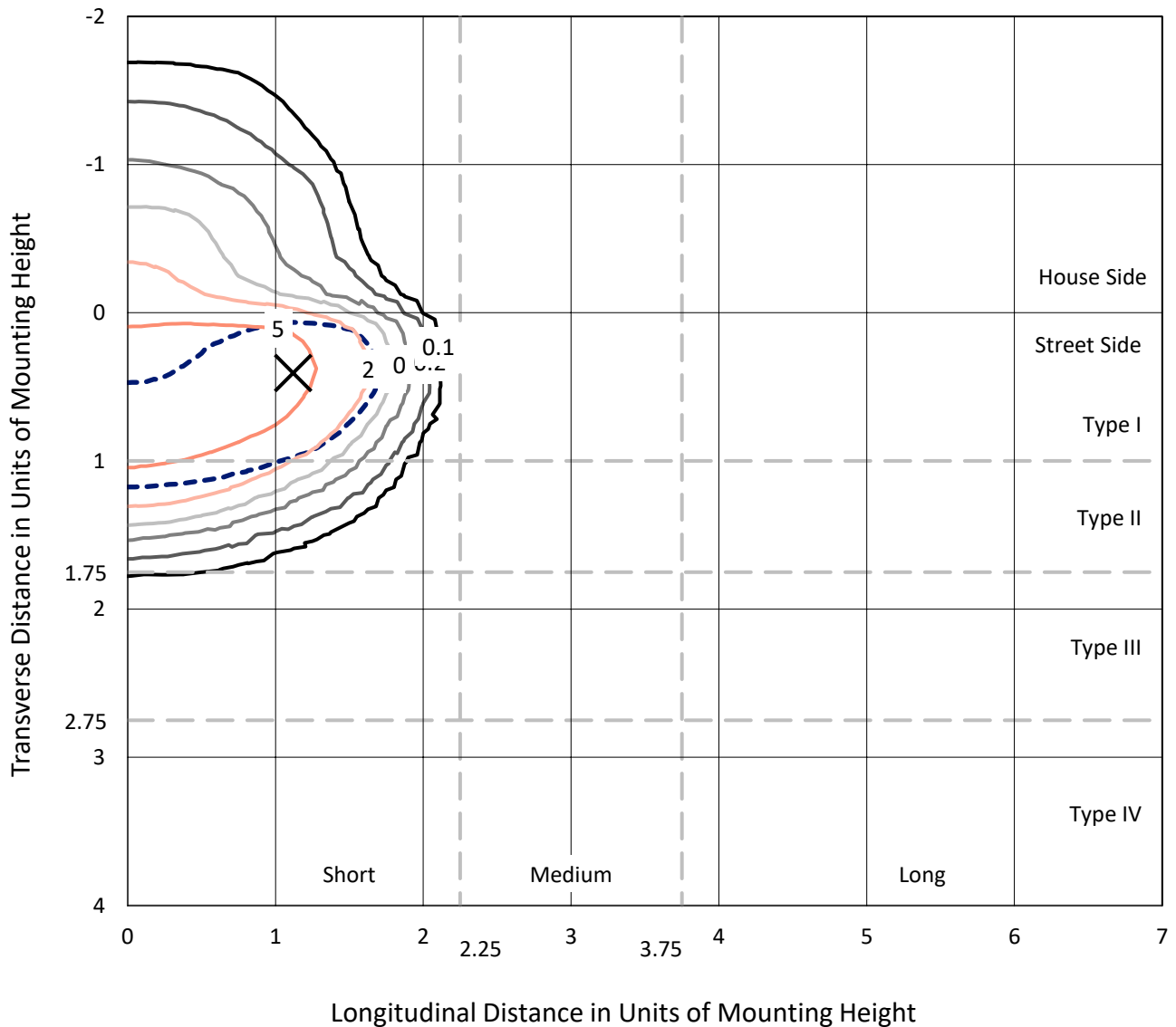
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

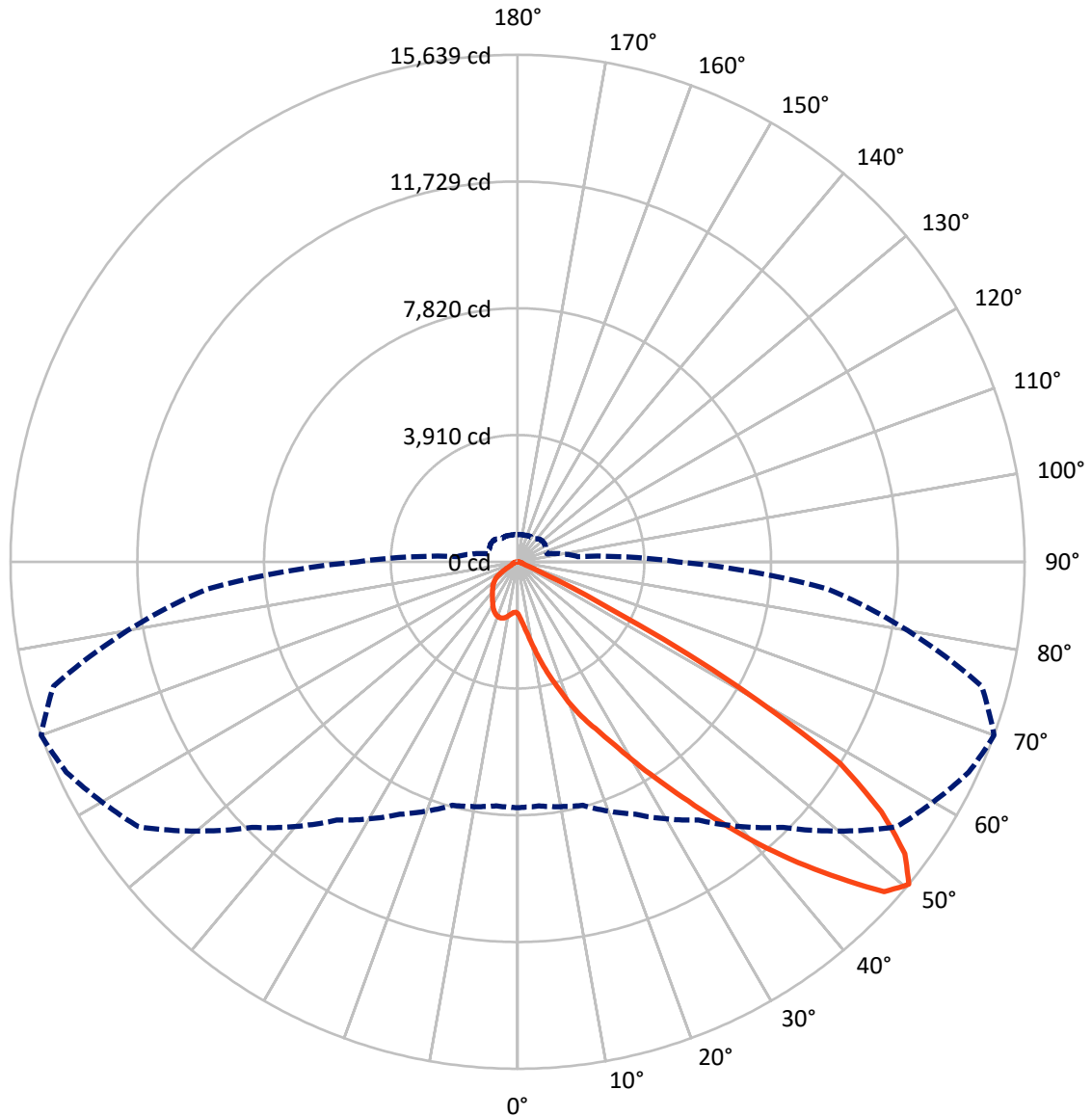
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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

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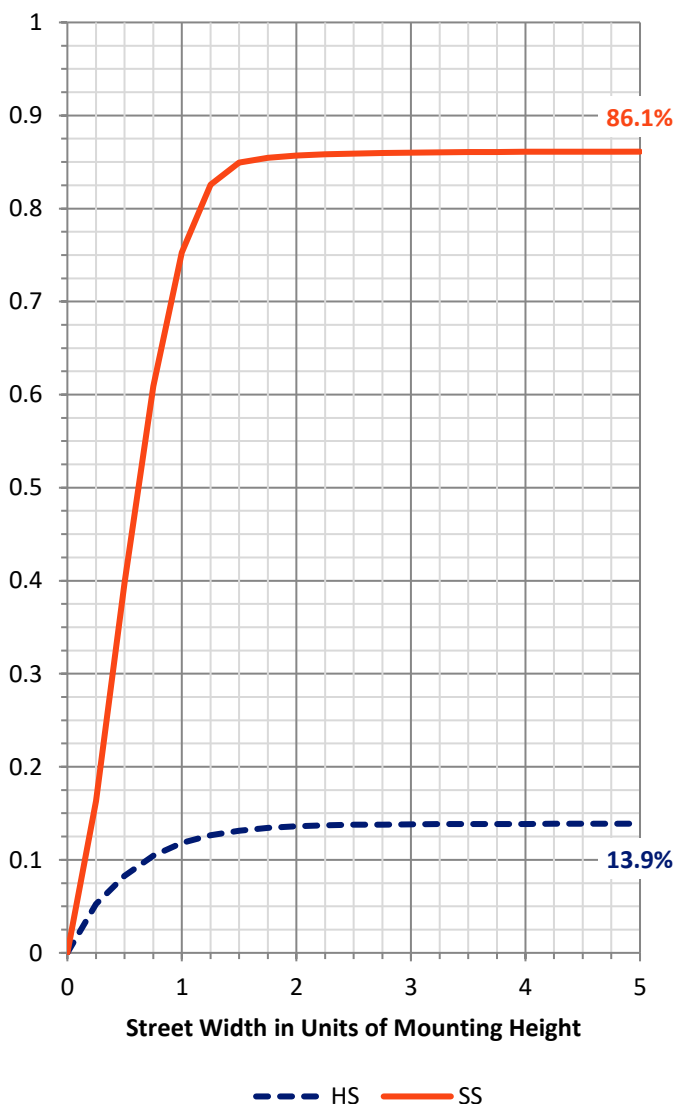
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2160.4	0.0	2160.4
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	13308.9	0.0	13308.9
	% Fixture	86.0	0.0	86.0
Total	Lumens	15469.3	0.0	15469.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.4	1.3
10°-20°	901.3	5.8
20°-30°	1890.8	12.2
30°-40°	3259.0	21.1
40°-50°	4763.0	30.8
50°-60°	3709.6	24.0
60°-70°	628.5	4.1
70°-80°	86.3	0.6
80°-90°	22.3	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°	15469.3	100.0
0°-180°	15469.3	100.0

Coefficient of Utilization



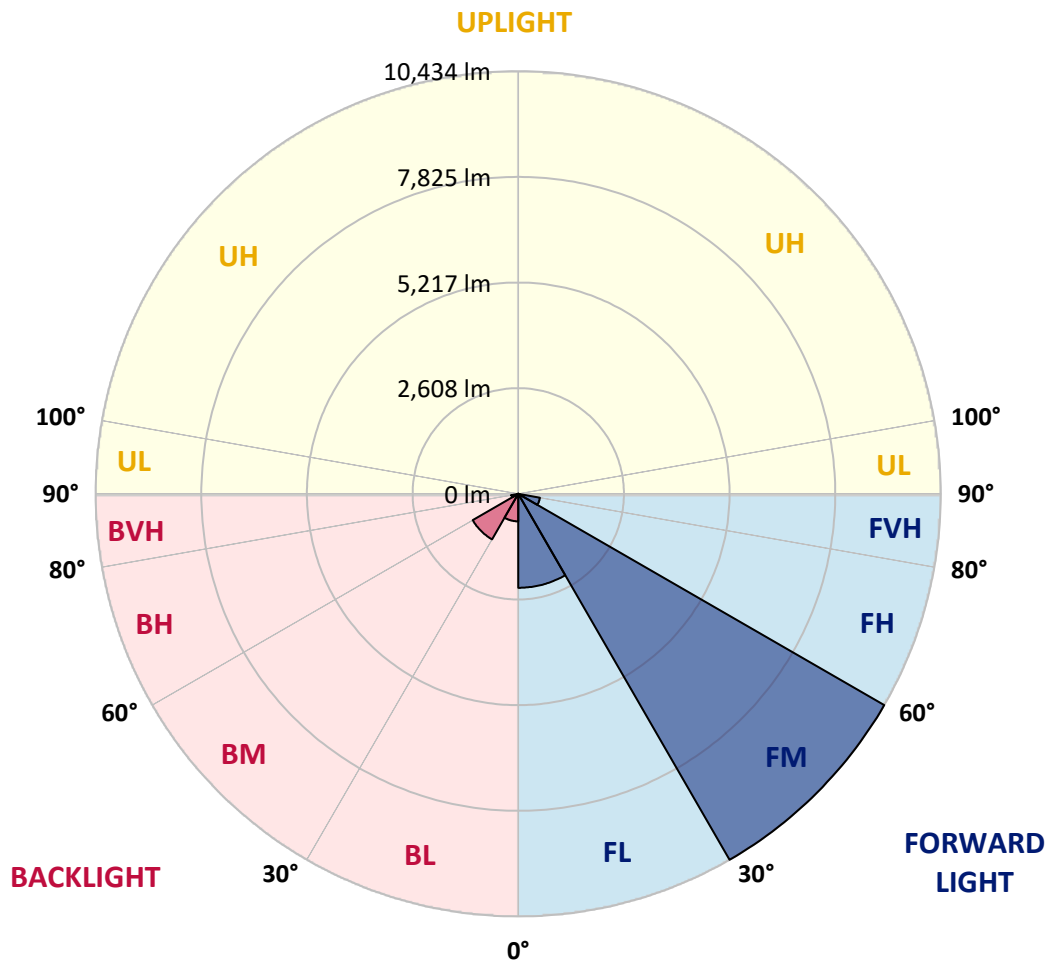
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2320.6	15.0			
FM (30°-60°)	10433.8	67.4			
FH (60°-80°)	544.2	3.5			G0/660
FVH (80°-90°)	10.3	0.1			G1/100
BL (0°-30°)	679.8	4.4	B2/1000		
BM (30°-60°)	1297.9	8.4	B2/2500		
BH (60°-80°)	170.7	1.1	B1/500		G1/500
BVH (80°-90°)	12.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4
2.5°	2098.3	2083.0	2049.9	1988.9	1963.5	1902.4	1866.9	1798.1	1754.9	1706.6	1653.2
5°	2955.4	2876.6	2828.2	2759.6	2558.7	2434.0	2228.0	2052.5	1971.1	1882.1	1760.0
7.5°	3840.5	3789.6	3723.5	3575.9	3438.6	3179.2	2825.7	2439.1	2273.7	2121.2	1879.6
10°	4572.9	4430.6	4422.9	4313.6	4163.5	3853.2	3428.4	2947.8	2652.8	2428.9	2049.9
12.5°	5084.2	4954.5	5012.9	5000.2	4860.4	4575.5	4084.7	3448.8	3141.1	2792.6	2225.5
15°	5549.6	5496.2	5478.4	5463.1	5407.2	5196.1	4756.1	4059.2	3614.1	3194.5	2423.8
17.5°	6004.9	5867.6	5933.7	5946.4	5941.3	5750.6	5338.5	4639.1	4115.2	3619.2	2632.4
20°	6409.3	6422.0	6333.0	6315.2	6299.9	6292.3	5890.4	5213.9	4730.6	4064.3	2904.6
22.5°	6928.2	6839.1	6918.0	6867.1	6767.9	6706.9	6399.1	5722.6	5264.7	4600.9	3181.8
25°	7541.1	7612.3	7426.6	7406.3	7296.9	7085.8	6808.6	6292.3	5778.5	5099.5	3481.9
27.5°	8296.5	8171.8	8123.5	8011.6	7813.2	7724.2	7398.6	6879.8	6399.1	5623.3	3771.8
30°	8945.0	8912.0	8670.4	8538.1	8365.1	8362.6	7907.3	7675.9	7207.9	6444.9	4171.1
32.5°	9474.0	9329.0	9240.1	9148.5	9008.6	9046.7	8662.7	8540.6	8070.1	7207.9	4641.6
35°	9827.6	9723.3	9669.9	9530.0	9489.3	9659.7	9499.4	9448.6	9062.0	8281.2	5193.5
37.5°	9939.4	9972.6	9962.4	9786.9	9873.3	10333.7	10539.7	10407.5	10204.0	9413.0	5791.2
40°	10038.7	10061.6	10010.7	10216.7	10463.4	10987.3	11732.5	11513.8	11437.5	10560.0	6623.0
42.5°	10094.6	10076.8	10076.8	10432.9	10806.8	11859.7	12884.7	12739.7	12681.2	11780.9	7584.3
45°	9853.0	9680.1	9865.7	10348.9	11101.8	12289.5	13805.4	14006.4	13922.4	13233.1	8708.5
47.5°	8950.1	9056.9	9161.2	9807.2	10743.2	12157.3	14370.0	15054.2	15209.3	14453.9	9446.0
50°	7584.3	7561.4	7777.7	8591.5	9728.4	11587.6	14260.7	15356.8	15639.2	14820.2	9601.2
52.5°	5516.5	5684.4	5918.5	6727.2	8075.2	10112.4	12849.1	14576.0	14952.5	14370.0	9499.4
55°	3212.3	3026.6	3553.1	4237.2	5509.0	7627.5	10862.7	12920.3	13617.2	13551.0	8985.7
57.5°	1287.0	1246.3	1426.8	1922.8	2874.0	4728.1	7899.7	10616.0	11732.5	12411.6	7897.2
60°	564.6	551.9	648.6	783.4	1175.0	2179.7	4321.1	6602.6	7767.5	8672.9	5435.1
62.5°	407.0	401.8	450.2	498.5	620.6	948.6	1816.0	2660.3	3316.6	4005.8	2434.0
65°	328.1	340.8	373.9	399.3	457.8	526.5	640.9	740.1	907.9	941.1	536.6
67.5°	267.0	277.2	307.7	335.7	345.9	284.8	295.0	259.4	259.4	231.4	185.7
70°	195.9	198.4	234.0	267.0	213.6	114.5	200.9	200.9	180.6	172.9	157.7
72.5°	145.0	147.5	175.5	165.3	83.9	71.2	147.5	162.7	147.5	139.9	127.2
75°	106.8	109.3	91.6	38.2	35.6	45.8	86.5	111.9	106.8	104.3	96.6
77.5°	20.4	15.2	12.7	17.8	25.4	38.2	55.9	68.7	71.2	76.3	71.2
80°	2.5	2.5	7.7	15.2	28.0	40.7	58.5	66.1	68.7	71.2	66.1
82.5°	0.0	2.5	7.7	15.2	28.0	38.2	50.9	58.5	63.6	66.1	63.6
85°	0.0	2.5	5.0	12.7	22.9	28.0	25.4	17.8	15.2	17.8	12.7
87.5°	0.0	0.0	2.5	2.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4	1602.4
2.5°	1622.6	1612.5	1576.9	1538.8	1505.6	1520.9	1505.6	1492.9	1498.1	1492.9	1487.9
5°	1711.7	1665.9	1589.6	1556.5	1528.6	1526.0	1518.4	1515.8	1518.4	1518.4	1495.5
7.5°	1795.6	1721.9	1640.5	1604.9	1571.8	1574.4	1556.5	1556.5	1554.0	1541.3	1536.2
10°	1922.8	1823.6	1719.3	1655.8	1615.1	1607.4	1589.6	1571.8	1571.8	1571.8	1546.3
12.5°	2062.6	1938.1	1795.6	1721.9	1673.5	1635.4	1607.4	1602.4	1574.4	1569.2	1556.5
15°	2184.7	2027.1	1846.5	1744.7	1683.7	1632.8	1589.6	1561.7	1548.9	1541.3	1531.1
17.5°	2304.3	2103.3	1874.4	1744.7	1678.6	1620.1	1574.4	1548.9	1518.4	1523.5	1503.1
20°	2464.6	2184.7	1882.1	1711.7	1630.3	1574.4	1513.3	1500.6	1482.8	1467.5	1472.6
22.5°	2619.6	2243.3	1859.2	1671.0	1554.0	1487.9	1457.4	1442.1	1434.5	1421.7	1404.0
25°	2759.6	2306.9	1823.6	1597.2	1472.6	1424.3	1396.3	1393.8	1376.0	1376.0	1342.9
27.5°	2902.0	2329.7	1762.6	1510.8	1401.4	1373.4	1360.7	1355.6	1348.0	1330.2	1307.3
30°	3064.8	2337.4	1673.5	1421.7	1337.8	1307.3	1325.1	1337.8	1304.7	1271.7	1281.9
32.5°	3199.6	2319.6	1566.7	1337.8	1292.0	1276.8	1312.4	1325.1	1287.0	1251.3	1233.5
35°	3362.3	2276.3	1462.4	1271.7	1246.3	1276.8	1307.3	1307.3	1231.0	1187.7	1177.6
37.5°	3609.1	2228.0	1365.8	1215.7	1197.9	1261.5	1302.2	1274.2	1154.7	1101.3	1088.6
40°	3873.6	2197.4	1271.7	1159.7	1172.5	1236.1	1259.0	1172.5	1050.4	1017.4	1007.2
42.5°	4257.6	2136.4	1187.7	1111.5	1149.6	1200.4	1200.4	1045.4	999.5	981.7	979.2
45°	4735.8	2093.2	1114.0	1070.8	1116.5	1129.3	1088.6	979.2	946.1	941.1	943.6
47.5°	4969.7	2009.2	1037.7	1022.4	1055.5	1058.1	951.3	925.8	897.8	890.2	885.1
50°	4934.1	1859.2	938.5	958.8	1004.7	979.2	867.3	872.4	847.0	844.4	831.7
52.5°	4684.9	1622.6	839.3	887.7	938.5	864.7	798.6	793.6	793.6	760.4	747.7
55°	4153.3	1307.3	719.8	780.8	841.8	727.4	709.6	704.5	691.8	661.3	653.6
57.5°	3288.6	958.8	541.8	607.9	714.7	618.1	615.5	592.6	559.5	536.6	536.6
60°	1955.8	551.9	340.8	371.3	473.1	501.1	557.0	546.8	490.9	455.2	445.1
62.5°	892.7	284.8	216.2	221.3	254.3	325.6	437.5	506.1	427.3	366.3	361.1
65°	300.2	211.1	178.0	170.4	175.5	195.9	262.0	358.6	340.8	282.3	272.1
67.5°	183.1	188.2	167.9	155.2	155.2	152.6	150.0	162.7	200.9	195.9	198.4
70°	157.7	172.9	155.2	139.9	134.8	127.2	106.8	89.0	76.3	89.0	94.1
72.5°	127.2	137.3	132.3	119.5	106.8	96.6	76.3	58.5	43.2	38.2	38.2
75°	94.1	101.8	106.8	91.6	81.4	68.7	55.9	38.2	22.9	15.2	15.2
77.5°	68.7	76.3	78.9	71.2	61.1	48.4	35.6	25.4	12.7	5.0	5.0
80°	58.5	68.7	76.3	71.2	63.6	45.8	33.1	17.8	10.2	2.5	2.5
82.5°	55.9	68.7	76.3	68.7	61.1	43.2	33.1	20.4	7.7	2.5	2.5
85°	12.7	17.8	22.9	28.0	33.1	33.1	25.4	15.2	7.7	2.5	2.5
87.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.5	2.5	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)