

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: P651497

Luminaire Tested: **GALN-SA7D-840-U-AFL-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA7D-840-U-AFL-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33804 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

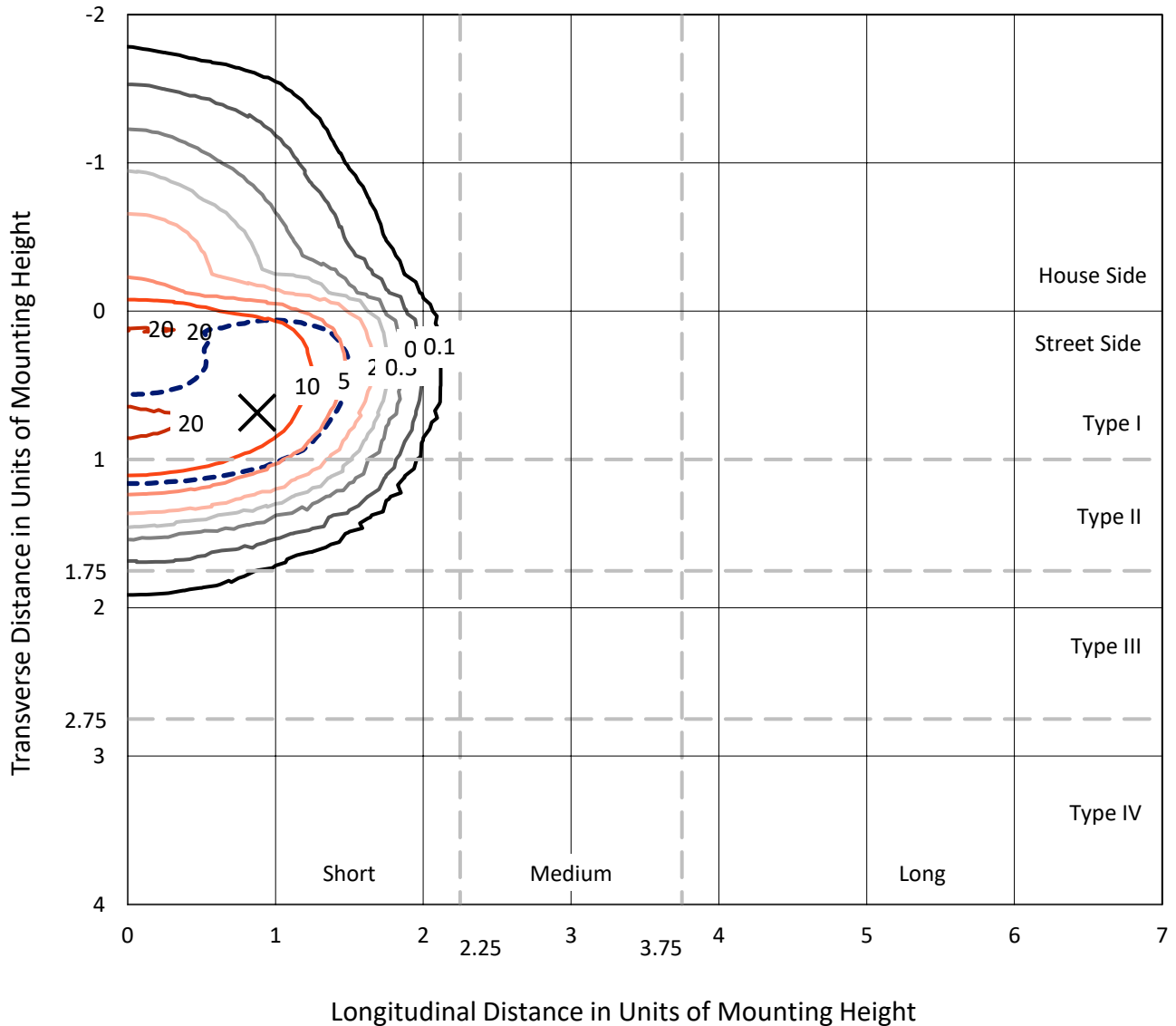
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651497
 CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

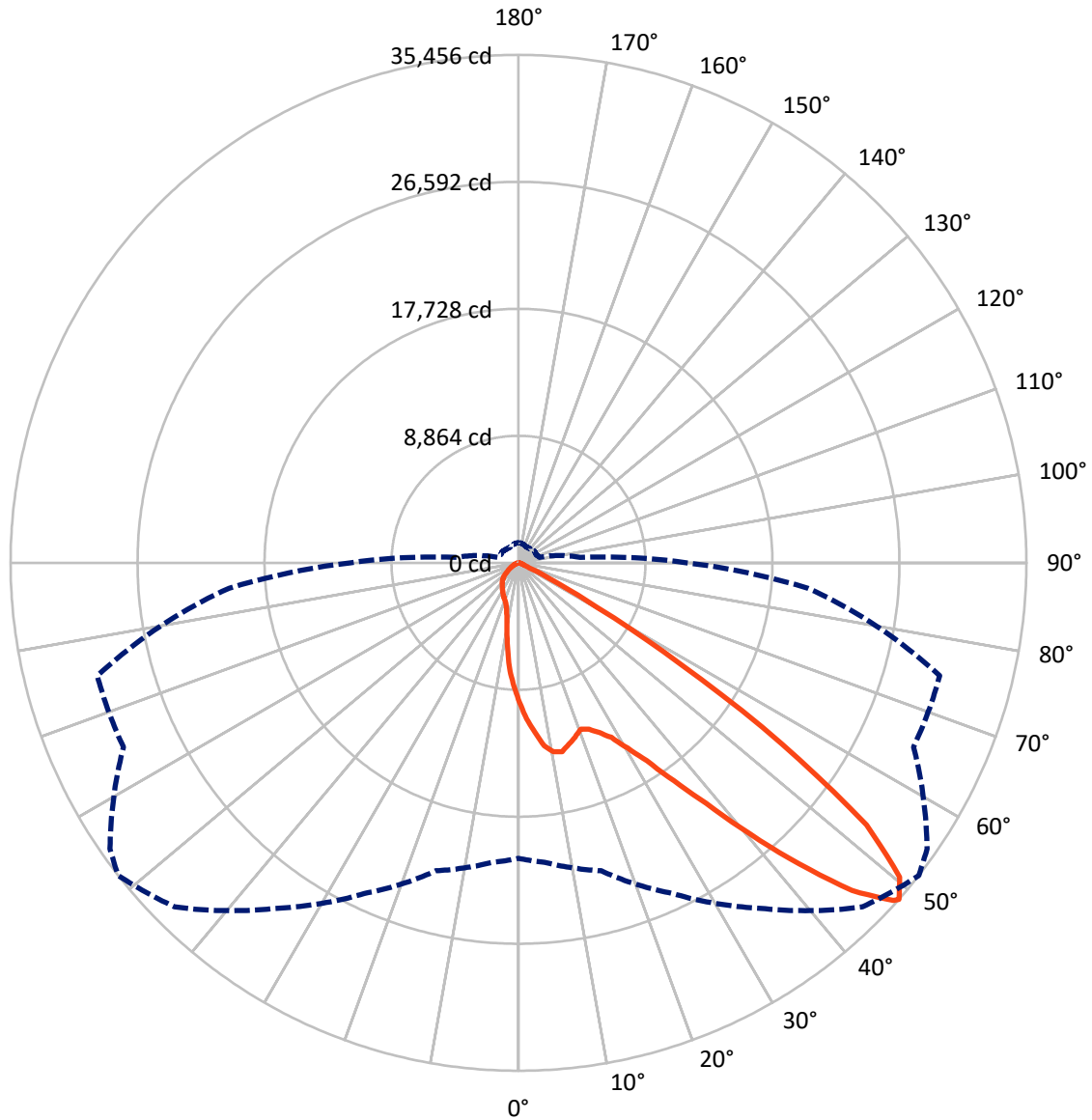
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.8 fc
 Type II - Short - N/A

REPORT NUMBER: P651497
CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral - - - Horizontal Cone Through 48-Deg Vertical

REPORT NUMBER: P651497
 CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4115.9	0.0	4115.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	29688.1	0.0	29688.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	33804.0	0.0	33804.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	893.5	2.6
10°-20°	2335.0	6.9
20°-30°	3986.9	11.8
30°-40°	7341.8	21.7
40°-50°	11401.9	33.7
50°-60°	6862.0	20.3
60°-70°	793.7	2.3
70°-80°	153.6	0.5
80°-90°	35.5	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°	33804.0	100.0
0°-180°	33804.0	100.0

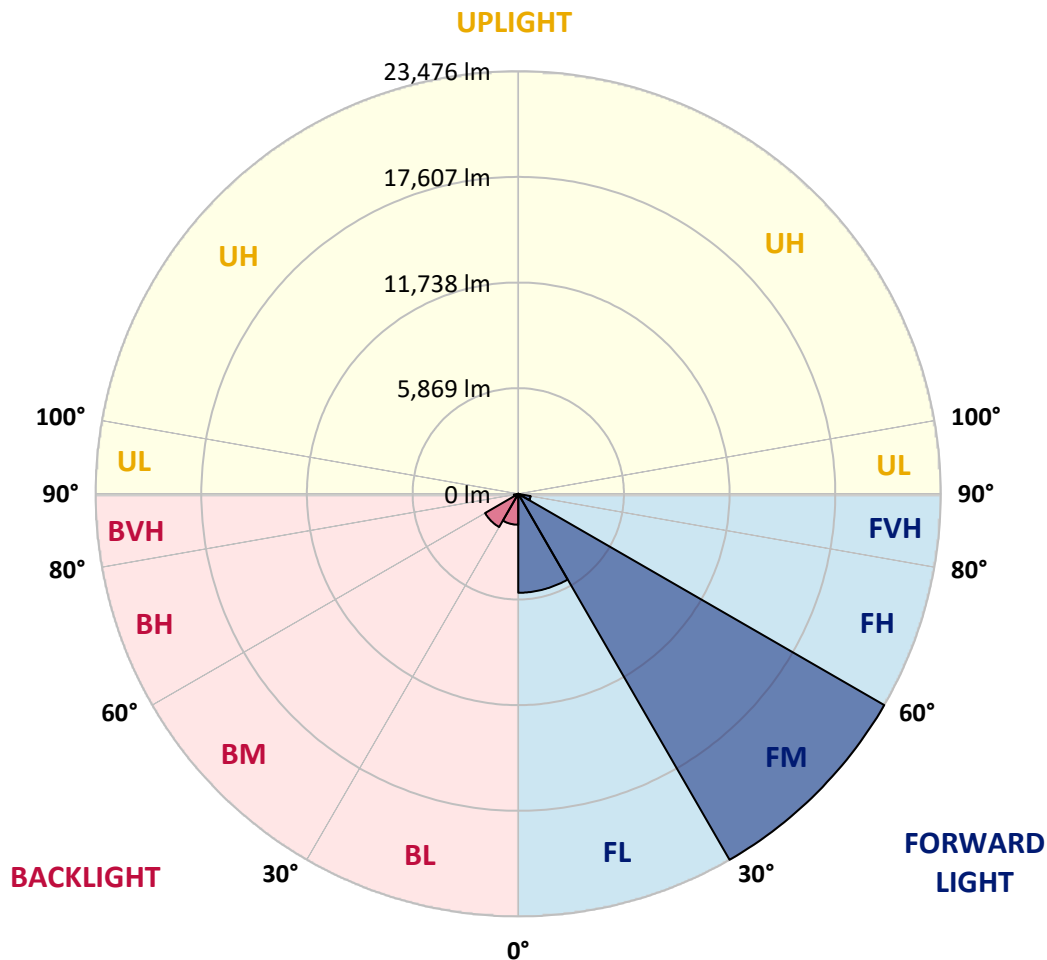


REPORT NUMBER: P651497
 CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5496.1	16.3			
FM (30°-60°)	23476.2	69.4			
FH (60°-80°)	698.9	2.1			G1/1800
FVH (80°-90°)	16.9	0.1			G1/100
BL (0°-30°)	1719.3	5.1	B3/2500		
BM (30°-60°)	2129.5	6.3	B2/2500		
BH (60°-80°)	248.4	0.7	B1/500		G1/500
BVH (80°-90°)	18.6	0.1			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 II Short





REPORT NUMBER: P651497

CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0
2.5°	11831.7	11560.7	11585.4	11407.9	11304.5	11136.9	10910.2	10865.9	10619.5	10284.4	9944.3
5°	12896.1	12832.1	12915.8	12659.6	12669.4	12393.5	11861.3	11871.1	11304.5	10757.5	10230.2
7.5°	12965.1	12817.3	12901.0	13127.8	13260.8	13211.5	12910.9	12649.7	12112.6	11309.3	10540.6
10°	11610.0	11890.8	11979.5	12354.0	12886.3	13448.0	13413.5	13428.3	12979.9	11930.3	10806.8
12.5°	10796.8	10609.6	10910.2	11136.9	11940.1	13029.2	13526.9	13635.3	13669.8	12531.5	11072.9
15°	10427.3	10427.3	10476.6	10540.6	11122.1	12127.4	13142.6	13457.9	14202.0	13319.9	11491.7
17.5°	10658.9	10649.1	10718.0	10585.0	10801.8	11575.4	12787.7	13147.4	14798.2	14093.6	11821.9
20°	11363.6	11398.1	11353.8	10969.3	10984.1	11565.6	12393.5	12960.2	15202.3	14763.8	12260.4
22.5°	12344.2	12364.0	12112.6	11693.8	11570.6	11856.3	12620.2	13053.8	15527.6	15567.0	12393.5
25°	13477.6	13398.8	13349.5	12758.1	12383.6	12630.1	13132.6	13384.0	15729.6	16257.0	12772.9
27.5°	15049.6	14891.9	14591.3	14064.0	13788.1	13438.2	13798.0	14211.9	16306.2	17222.8	13186.9
30°	17370.6	17232.6	16646.2	15966.1	15241.8	14896.8	15010.2	15236.8	17346.0	18341.4	13733.9
32.5°	20864.5	20573.7	19726.1	18430.1	17444.5	16493.4	16463.9	16705.4	18277.3	19888.7	14384.3
35°	24713.0	24624.4	23377.6	22042.2	20135.1	18666.6	18691.2	18819.4	20061.2	21919.0	15236.8
37.5°	27270.6	27758.5	26965.1	25531.1	23929.6	21830.3	21298.1	21342.4	22510.3	24323.7	16774.3
40°	29246.7	28832.8	28926.4	28591.3	27497.3	26068.2	24890.5	24658.9	25343.9	26984.8	18301.9
42.5°	28384.3	28404.0	28980.6	29773.9	30045.0	29941.5	28739.1	28300.5	27768.3	29162.9	19755.7
45°	25950.0	26457.5	27206.5	29305.8	31148.8	32878.5	32642.0	31912.7	29443.7	30887.7	20593.4
47.5°	22066.8	22047.2	23274.2	26004.1	30099.2	34149.9	35224.1	34711.6	30631.4	30695.5	20420.9
48°	20632.8	20987.7	22254.1	25467.0	29433.9	33962.6	35455.7	34810.2	30429.3	30439.2	20273.1
50°	15251.6	15187.5	16764.5	20706.8	26290.0	31912.7	34480.0	34982.7	30424.4	29143.2	19238.2
52.5°	8057.0	8333.0	9481.2	13019.4	18587.8	26117.5	30414.6	31198.1	29350.1	27024.2	17750.1
55°	3424.8	3094.7	3976.8	5878.9	10456.8	17449.5	22313.2	24057.6	24816.6	23914.8	15527.6
57.5°	1222.1	1335.4	1537.5	2212.6	4395.7	9550.1	13305.1	14660.3	17193.2	17548.0	10580.0
60°	783.6	798.3	862.4	1015.2	1650.8	3681.1	6312.5	7391.7	8539.9	8815.9	4937.7
62.5°	606.1	611.1	640.6	665.2	783.6	1429.1	2370.3	2808.9	2917.3	2508.3	1296.0
65°	507.5	512.5	522.3	522.3	556.8	670.2	827.9	911.6	887.0	877.2	734.3
67.5°	389.3	399.1	418.9	418.9	438.6	409.0	458.3	487.9	551.9	670.2	625.9
70°	305.5	310.4	325.2	335.1	335.1	295.7	330.2	359.7	404.1	497.7	492.7
72.5°	236.6	246.4	256.3	256.3	241.5	202.0	236.6	261.2	290.7	345.0	335.1
75°	182.3	182.3	187.3	152.7	118.2	103.4	142.9	172.5	216.8	226.6	187.3
77.5°	49.3	54.2	49.3	44.3	49.3	73.9	93.6	108.4	138.0	138.0	123.2
80°	0.0	5.0	14.8	29.6	49.3	69.0	83.8	93.6	108.4	118.2	113.4
82.5°	0.0	5.0	14.8	29.6	44.3	54.2	73.9	78.9	88.7	103.4	103.4
85°	0.0	5.0	9.8	19.7	29.6	34.5	34.5	29.6	29.6	24.6	19.7
87.5°	0.0	0.0	5.0	9.8	9.8	14.8	14.8	14.8	14.8	14.8	14.8
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: P651497

CATALOG NUMBER: GALN-SA7D-840-U-AFL-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0	9762.0
2.5°	9811.3	9658.5	9426.9	9062.3	8712.4	8485.7	8268.9	8027.4	7894.4	7884.5	7810.6
5°	9929.6	9584.6	9032.7	8406.9	7736.7	7160.1	6578.6	6199.2	5859.2	5672.0	5637.5
7.5°	9993.6	9545.2	8653.3	7603.6	6460.4	5519.1	4868.7	4390.7	4203.4	4065.5	4060.5
10°	10126.7	9476.2	8086.6	6539.2	5125.0	4173.9	3725.5	3508.7	3405.1	3365.7	3306.6
12.5°	10225.2	9348.1	7505.1	5445.2	4050.7	3459.4	3262.2	3213.0	3217.8	3237.6	3213.0
15°	10363.2	9234.8	6721.5	4469.6	3400.2	3114.4	3114.4	3124.2	3193.2	3203.1	3198.2
17.5°	10353.4	9013.0	5913.4	3681.1	3006.0	2966.5	2981.3	3074.9	3119.4	3134.1	3099.6
20°	10471.6	8806.0	5080.6	3144.0	2784.2	2843.3	2941.9	2966.5	3020.8	3030.6	2991.2
22.5°	10437.1	8288.6	4306.9	2720.1	2616.7	2730.1	2828.5	2858.1	2843.3	2813.8	2808.9
25°	10373.1	7845.1	3597.3	2439.2	2493.5	2616.7	2710.3	2656.1	2626.5	2631.5	2636.4
27.5°	10259.8	7283.3	3010.9	2242.2	2326.0	2508.3	2503.3	2483.6	2513.2	2488.5	2513.2
30°	10240.0	6721.5	2528.0	2064.7	2202.7	2335.8	2345.6	2380.1	2414.6	2370.3	2414.6
32.5°	10269.6	6105.6	2183.1	1956.3	2128.8	2133.8	2242.2	2276.7	2252.0	2153.5	2163.3
35°	10496.3	5632.5	1931.7	1897.2	2010.6	2015.5	2119.0	2074.6	1966.2	1907.1	1941.5
37.5°	10974.3	5238.3	1813.4	1843.0	1852.9	1916.9	1921.9	1833.1	1843.0	1838.1	1857.8
40°	11585.4	4937.7	1729.7	1793.8	1783.8	1828.2	1650.8	1700.1	1744.5	1759.2	1769.1
42.5°	12004.2	4720.9	1675.4	1714.9	1695.2	1616.3	1517.8	1567.0	1601.5	1655.8	1665.6
45°	12191.5	4548.4	1611.4	1576.9	1576.9	1434.0	1394.5	1404.5	1483.3	1542.4	1532.6
47.5°	11885.9	4380.9	1498.1	1394.5	1429.1	1310.8	1266.5	1266.5	1350.2	1424.1	1409.3
48°	11767.7	4311.9	1503.0	1355.2	1379.8	1291.1	1246.8	1236.9	1330.5	1399.5	1399.5
50°	11181.3	4055.6	1374.9	1246.8	1197.5	1187.6	1158.1	1167.9	1227.0	1291.1	1291.1
52.5°	10038.0	3503.7	1162.9	1069.3	980.6	1039.8	1054.5	1034.9	1064.4	1123.6	1118.6
55°	8377.3	2690.6	931.3	887.0	818.0	882.0	911.6	887.0	857.5	901.8	901.8
57.5°	5366.4	1448.8	744.1	754.0	685.0	749.0	773.6	714.5	660.4	694.8	689.9
60°	2419.6	867.3	611.1	596.3	551.9	625.9	665.2	596.3	522.3	547.0	571.6
62.5°	906.7	615.9	463.2	453.4	443.5	512.5	532.2	478.0	404.1	418.9	423.8
65°	665.2	542.0	369.6	335.1	354.8	404.1	394.3	340.0	290.7	290.7	300.6
67.5°	566.7	473.1	300.6	261.2	261.2	266.1	246.4	216.8	202.0	211.9	221.8
70°	443.5	374.5	236.6	202.0	182.3	162.6	142.9	138.0	123.2	138.0	133.0
72.5°	285.9	251.3	182.3	152.7	138.0	113.4	93.6	88.7	73.9	69.0	69.0
75°	152.7	152.7	142.9	123.2	108.4	88.7	73.9	59.1	39.4	29.6	29.6
77.5°	108.4	118.2	128.1	118.2	98.6	73.9	59.1	39.4	19.7	9.8	9.8
80°	103.4	118.2	128.1	113.4	98.6	73.9	54.2	29.6	14.8	5.0	5.0
82.5°	93.6	108.4	118.2	103.4	88.7	64.1	49.3	29.6	14.8	5.0	5.0
85°	19.7	24.6	29.6	29.6	34.5	44.3	34.5	24.6	9.8	5.0	5.0
87.5°	14.8	14.8	14.8	14.8	14.8	14.8	9.8	9.8	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

(END OF REPORT)