

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: P651376

Luminaire Tested: **GALN-SA4D-840-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-840-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18618.1 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G4

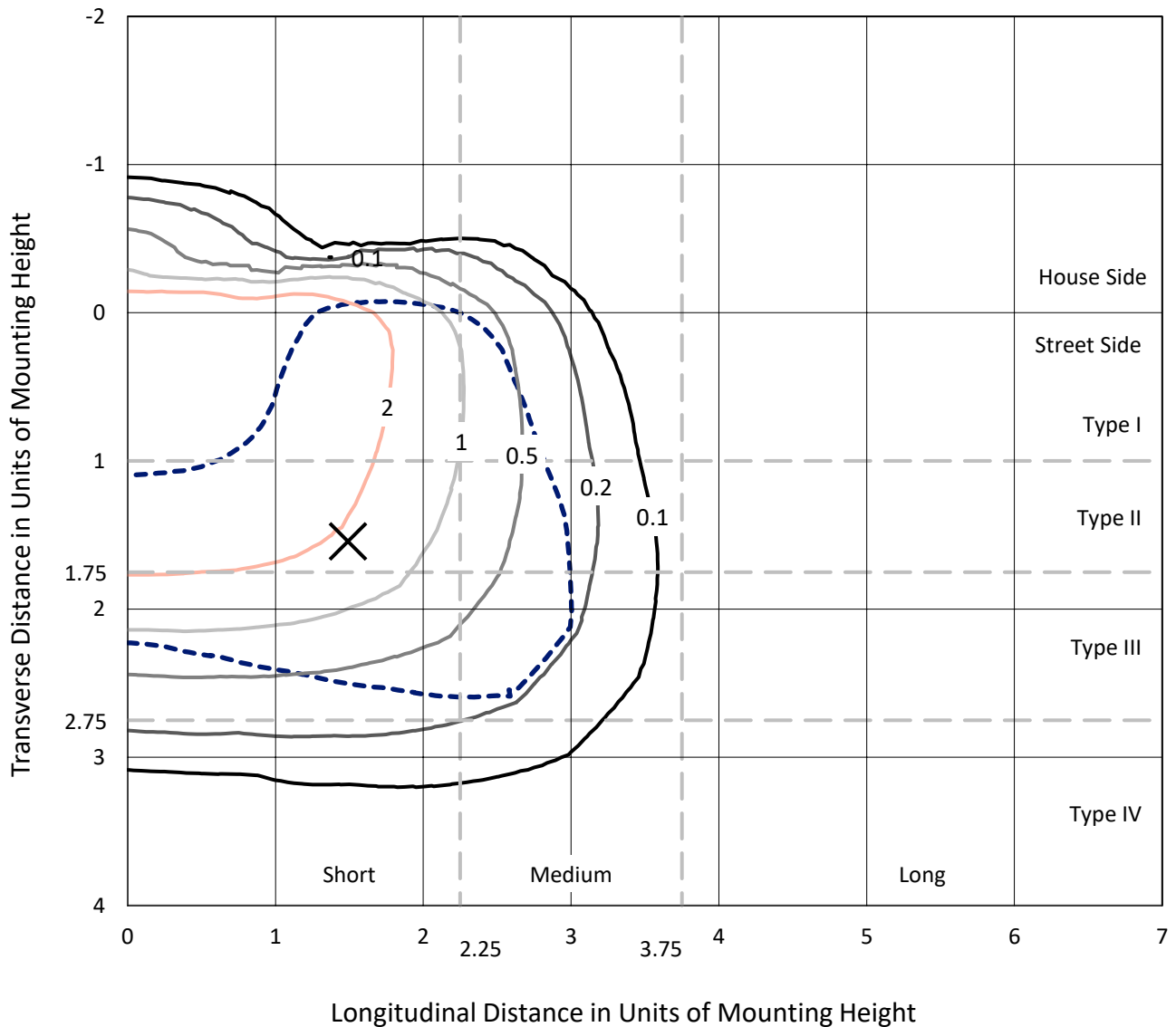
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651376
 CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

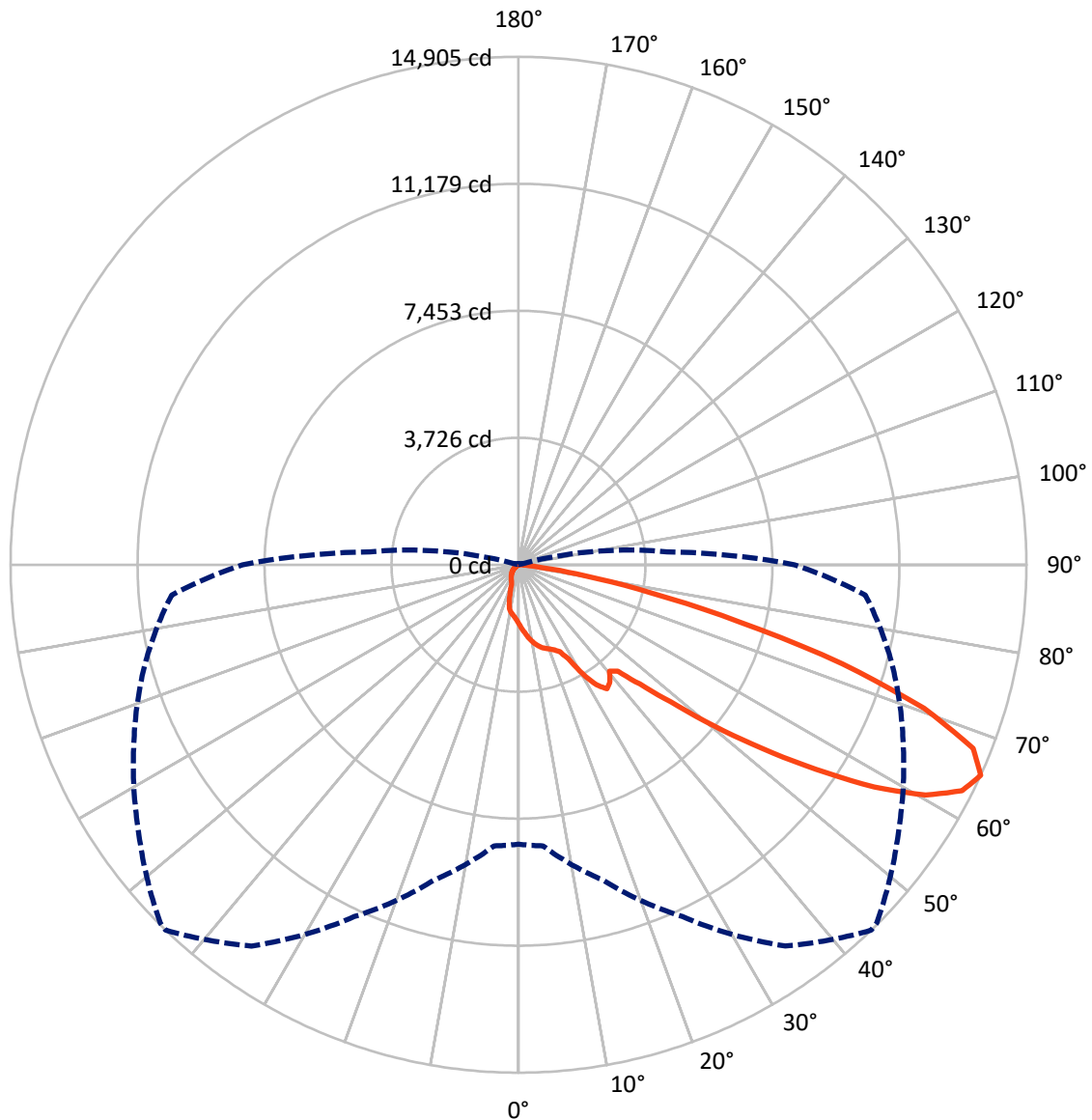
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - N/A

REPORT NUMBER: P651376
CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P651376
 CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

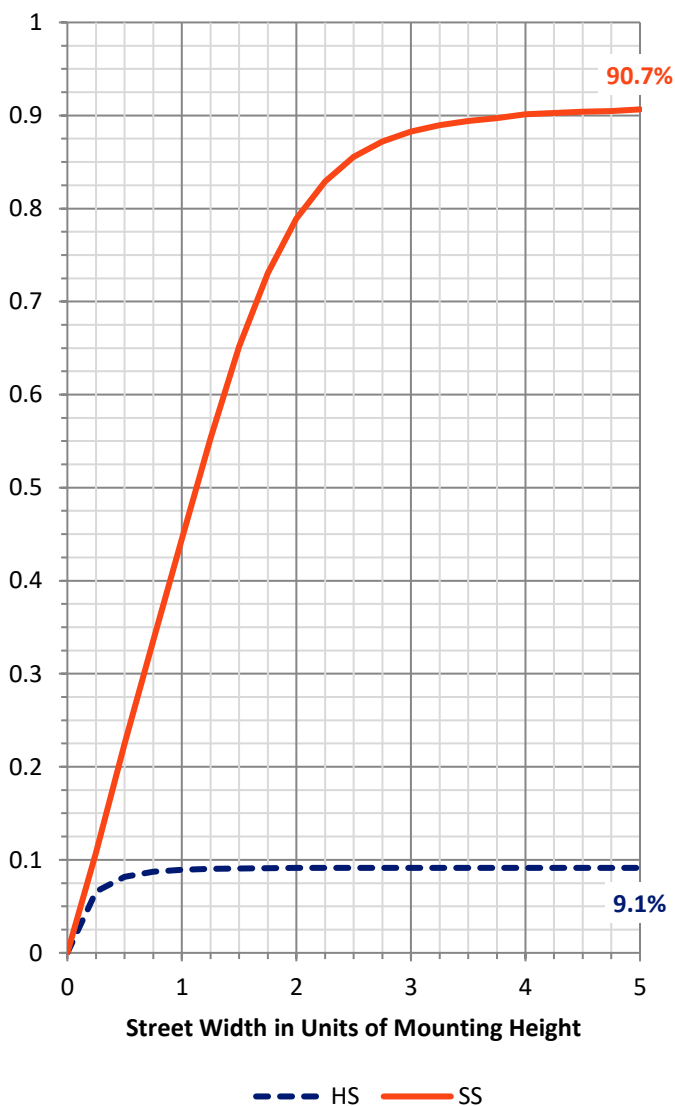
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1715.4	0.0	1715.4
	% Fixture	9.2	0.0	9.2
Street Side	Lumens	16902.7	0.0	16902.7
	% Fixture	90.8	0.0	90.8
Total	Lumens	18618.1	0.0	18618.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.3	0.9
10°-20°	518.7	2.8
20°-30°	879.5	4.7
30°-40°	1462.4	7.9
40°-50°	2553.3	13.7
50°-60°	4988.3	26.8
60°-70°	5787.5	31.1
70°-80°	2107.5	11.3
80°-90°	148.5	0.8
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°	18618.1	100.0
0°-180°	18618.1	100.0

Coefficient of Utilization



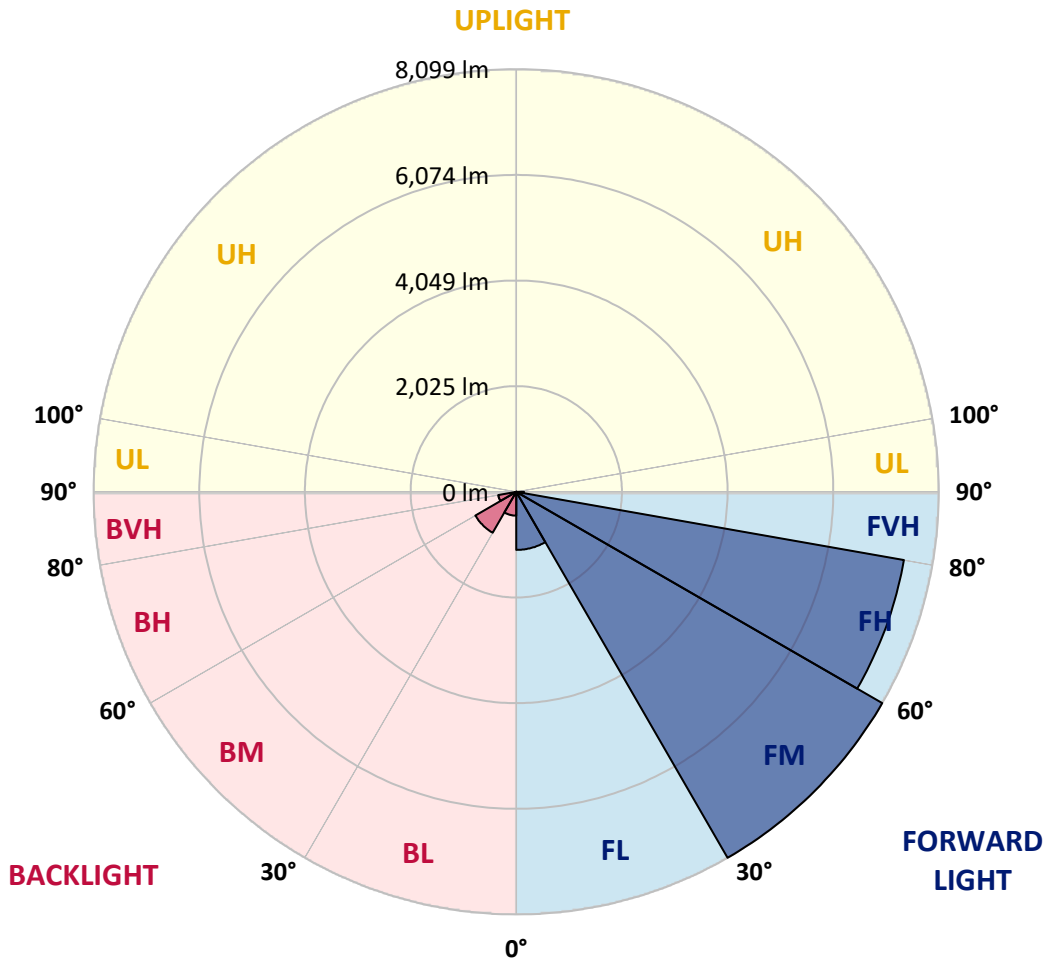
REPORT NUMBER: P651376
 CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1113.5	6.0			
FM (30°-60°)	8098.9	43.5			
FH (60°-80°)	7543.8	40.5			G4/12000
FVH (80°-90°)	146.5	0.8			G2/225
BL (0°-30°)	457.0	2.5	B1/500		
BM (30°-60°)	905.0	4.9	B1/1000		
BH (60°-80°)	351.3	1.9	B1/500		G1/500
BVH (80°-90°)	2.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





REPORT NUMBER: P651376

CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8
2.5°	1950.4	1942.0	1937.7	1914.9	1897.8	1876.4	1876.4	1849.4	1818.2	1784.0	1752.7
5°	2168.1	2153.9	2135.4	2115.5	2075.7	2018.7	2018.7	1961.8	1896.4	1838.1	1774.0
7.5°	2377.3	2364.5	2333.1	2294.8	2229.3	2169.5	2165.2	2082.7	2004.5	1916.3	1825.2
10°	2560.8	2550.8	2523.8	2449.8	2381.5	2303.2	2301.8	2209.4	2118.3	2010.2	1897.8
12.5°	2688.8	2690.2	2654.7	2583.6	2495.3	2421.3	2415.7	2324.6	2229.3	2112.6	1974.7
15°	2779.8	2779.8	2742.8	2663.2	2583.6	2518.1	2512.4	2432.8	2334.5	2208.0	2058.6
17.5°	2805.5	2814.0	2774.2	2703.1	2639.0	2582.1	2580.7	2513.8	2435.5	2313.3	2144.0
20°	2795.5	2804.1	2772.8	2717.3	2673.1	2640.4	2636.2	2609.1	2536.6	2421.3	2235.0
22.5°	2774.2	2782.7	2759.9	2727.2	2705.9	2715.8	2708.7	2731.5	2693.1	2553.6	2343.1
25°	2778.4	2787.0	2769.9	2751.4	2769.9	2831.1	2849.6	2947.7	2913.6	2721.6	2459.8
27.5°	2912.1	2929.2	2905.1	2913.6	2979.0	3121.3	3156.9	3326.2	3175.4	2934.9	2641.8
30°	3209.5	3198.2	3152.6	3193.9	3421.4	3723.1	3713.1	3686.1	3450.0	3181.1	2858.1
32.5°	3479.8	3469.9	3467.0	3644.8	4057.4	4203.9	4196.8	3935.0	3696.0	3462.7	3071.5
35°	3589.3	3551.0	3542.4	3973.5	4663.4	4470.0	4425.8	4037.5	3994.8	3770.0	3289.2
37.5°	3919.4	3892.4	3760.0	4027.5	4421.6	4357.6	4323.4	4213.9	4313.5	4041.8	3535.3
40°	4599.4	4524.0	4404.5	4142.8	4078.8	4105.8	4139.9	4440.1	4690.5	4413.1	3863.9
42.5°	5444.5	5427.4	5205.5	4717.5	4238.1	4275.1	4319.1	4912.4	5232.5	4972.2	4400.3
45°	6458.8	6483.0	6162.9	5586.8	4957.9	4989.2	5053.2	5609.5	5966.6	5841.4	5243.9
47.5°	7380.7	7362.2	7254.0	6655.2	6074.7	6005.0	6108.9	6504.4	6982.3	7002.3	6290.9
50°	8308.2	8406.5	8245.7	8010.9	7579.8	7433.3	7394.9	7588.4	8316.8	8221.4	7548.6
52.5°	9641.3	9692.5	9390.9	9331.1	9429.3	8954.1	8915.8	8962.7	9614.2	9287.1	8490.4
55°	10479.2	10449.3	10337.0	10803.6	11191.9	10598.7	10550.3	10361.1	10691.2	10039.6	9396.6
57.5°	10743.9	10786.5	11048.3	11891.9	12811.0	12307.4	12219.1	11681.4	11468.0	10741.0	10230.3
60°	10625.8	10704.0	11268.8	12523.6	13798.3	13722.8	13647.5	12744.1	12025.6	11327.1	10815.0
62.5°	9785.0	9894.5	10797.9	12411.2	14132.6	14603.5	14509.6	13407.1	12396.9	11611.7	10917.4
65°	8200.2	8281.2	9578.7	11391.2	13657.4	14905.1	14871.0	13614.8	12455.3	11351.3	10216.0
67.5°	5845.6	6121.6	7323.8	9600.0	12251.9	14390.1	14448.4	13365.8	11907.6	10226.0	8460.5
70°	3674.7	3862.5	4724.7	6872.8	9822.0	12624.6	12816.7	12226.2	10334.1	7971.1	5663.5
72.5°	1752.7	1892.1	2506.7	4350.5	6932.5	9933.0	10085.2	10036.7	7991.0	5021.9	2922.1
75°	781.0	833.7	1196.4	2220.7	4475.6	6676.5	7070.5	7136.0	4993.5	2456.9	1136.7
77.5°	398.4	399.7	560.5	1075.6	2235.0	3983.4	4061.7	4290.7	2707.3	1082.6	395.5
80°	212.0	226.2	297.3	507.9	1159.5	1961.8	1951.9	2145.4	1200.7	530.7	132.3
82.5°	95.3	105.3	167.9	266.0	566.2	744.0	802.4	877.8	515.0	338.6	58.4
85°	28.4	34.1	82.5	133.7	204.9	214.8	240.4	310.2	291.7	240.4	29.9
87.5°	4.3	4.3	34.1	37.0	29.9	38.4	39.9	44.1	93.9	88.2	15.6
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: P651376

CATALOG NUMBER: GALN-SA4D-840-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8	1732.8
2.5°	1735.7	1725.6	1690.1	1660.2	1634.7	1619.0	1600.5	1589.1	1583.4	1579.1	1580.6
5°	1742.7	1718.6	1657.4	1609.0	1572.0	1532.2	1505.1	1489.5	1482.4	1471.0	1471.0
7.5°	1782.6	1744.1	1658.8	1584.9	1520.8	1466.8	1415.6	1397.1	1384.2	1381.4	1378.6
10°	1839.5	1791.1	1674.4	1572.0	1481.0	1407.0	1334.4	1270.4	1220.6	1190.8	1186.5
12.5°	1910.6	1840.9	1698.7	1563.5	1446.9	1315.9	1123.9	994.4	907.7	880.6	884.9
15°	1976.1	1900.7	1722.8	1556.4	1384.2	1091.2	873.5	725.5	681.5	677.2	678.6
17.5°	2054.3	1964.7	1751.3	1546.4	1212.1	833.7	648.7	608.9	617.5	631.7	630.2
20°	2135.4	2032.9	1785.4	1486.6	967.4	627.4	573.3	577.6	590.4	603.2	606.0
22.5°	2222.2	2111.2	1825.2	1343.0	738.3	546.3	543.5	549.2	562.0	576.2	579.0
25°	2341.7	2209.4	1855.2	1155.2	559.1	505.0	510.7	520.7	532.1	547.7	550.6
27.5°	2495.3	2341.7	1870.8	910.5	483.7	468.0	469.4	483.7	498.0	512.2	512.2
30°	2694.5	2499.6	1839.5	688.5	446.7	432.5	426.8	435.3	453.8	468.0	469.4
32.5°	2872.4	2649.0	1756.9	526.4	419.7	399.7	385.5	386.9	394.1	402.6	404.0
35°	3050.1	2794.1	1616.1	442.5	391.2	368.4	347.2	335.7	330.1	325.8	330.1
37.5°	3277.8	2974.8	1428.4	402.6	367.0	338.6	308.7	284.5	264.6	251.8	254.7
40°	3570.9	3225.2	1206.4	377.0	344.3	310.2	270.3	239.0	204.9	193.5	187.8
42.5°	4054.5	3605.0	973.1	355.7	321.5	280.2	230.4	187.8	156.5	145.1	147.9
45°	4818.5	4084.4	749.8	332.9	298.7	247.5	193.5	147.9	122.4	116.6	119.5
47.5°	5831.4	4704.7	577.6	307.3	270.3	212.0	152.2	116.6	101.0	99.6	98.1
50°	6784.6	5282.3	482.3	278.9	236.2	176.4	125.2	98.1	88.2	86.8	86.8
52.5°	7646.7	5696.3	392.7	246.1	199.1	145.1	105.3	86.8	78.2	74.0	74.0
55°	8413.5	5966.6	318.7	206.3	156.5	115.2	91.1	78.2	68.3	62.6	61.1
57.5°	8992.6	5999.3	239.0	165.0	116.6	89.7	78.2	68.3	56.9	49.8	46.9
60°	9240.1	5716.2	176.4	125.2	86.8	71.1	62.6	55.5	42.6	35.6	34.1
62.5°	8991.1	5165.7	130.9	95.3	66.9	52.6	44.1	41.3	29.9	21.4	19.9
65°	8099.2	4370.3	103.9	72.6	49.8	38.4	28.4	27.0	18.5	9.9	8.5
67.5°	6488.7	3422.9	82.5	54.1	35.6	25.6	18.5	17.1	9.9	2.9	2.9
70°	4219.5	2188.0	66.9	39.9	22.8	17.1	11.4	8.5	5.7	1.4	0.0
72.5°	2087.0	1022.9	54.1	31.3	15.6	8.5	4.3	2.9	4.3	0.0	0.0
75°	809.5	364.2	39.9	21.4	8.5	4.3	2.9	0.0	1.4	0.0	0.0
77.5°	268.9	120.9	24.2	11.4	5.7	2.9	0.0	0.0	0.0	0.0	0.0
80°	99.6	46.9	12.8	7.1	2.9	1.4	0.0	0.0	0.0	0.0	0.0
82.5°	39.9	18.5	8.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.9	11.4	5.7	4.3	2.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.2	8.5	5.7	4.3	2.9	1.4	0.0	0.0	0.0	0.0	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)