

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: P453391

Luminaire Tested: **GALN-SA4B-830-U-SL4**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17509 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): 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

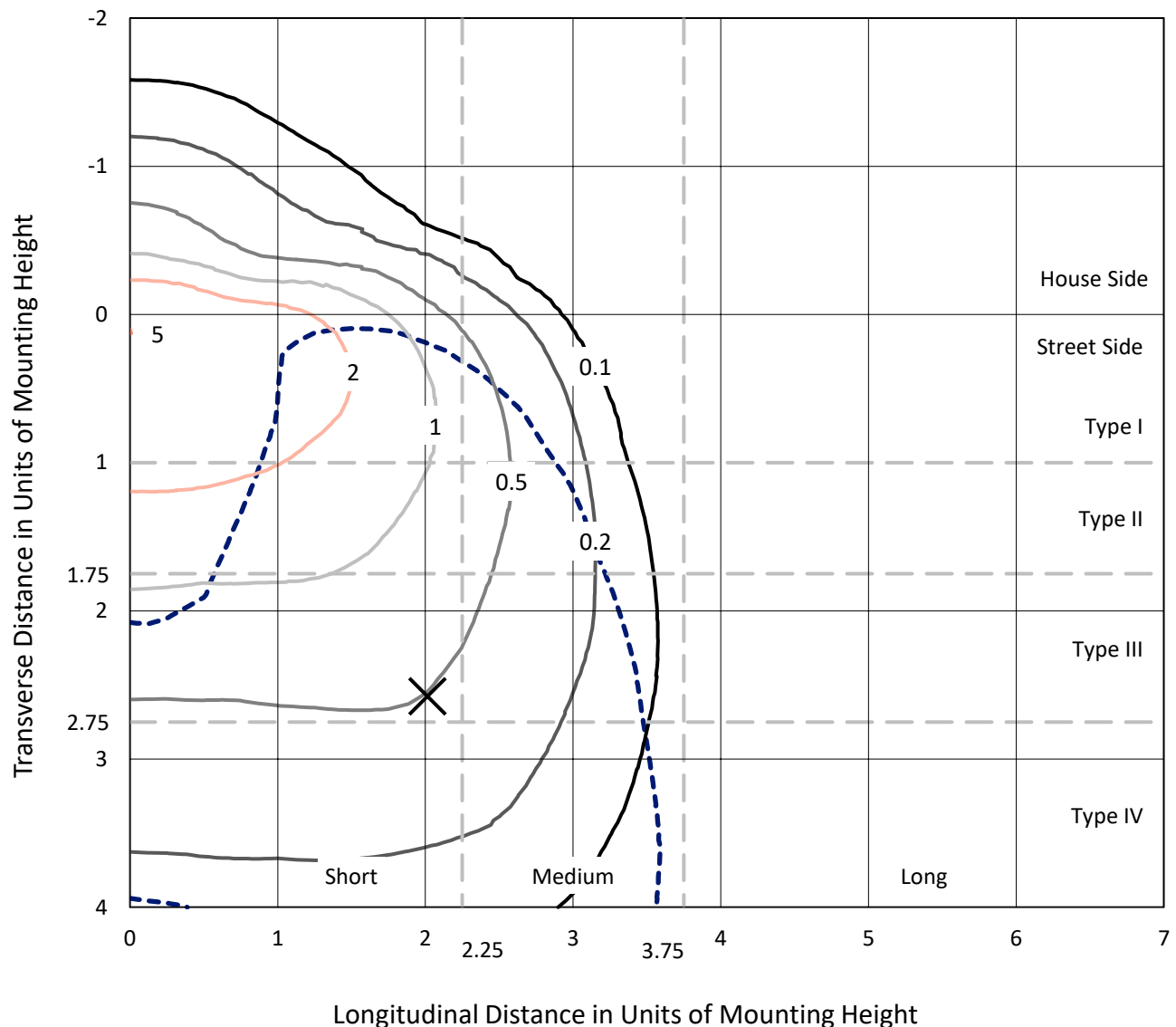


REPORT NUMBER: P453391

CATALOG NUMBER: GALN-SA4B-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

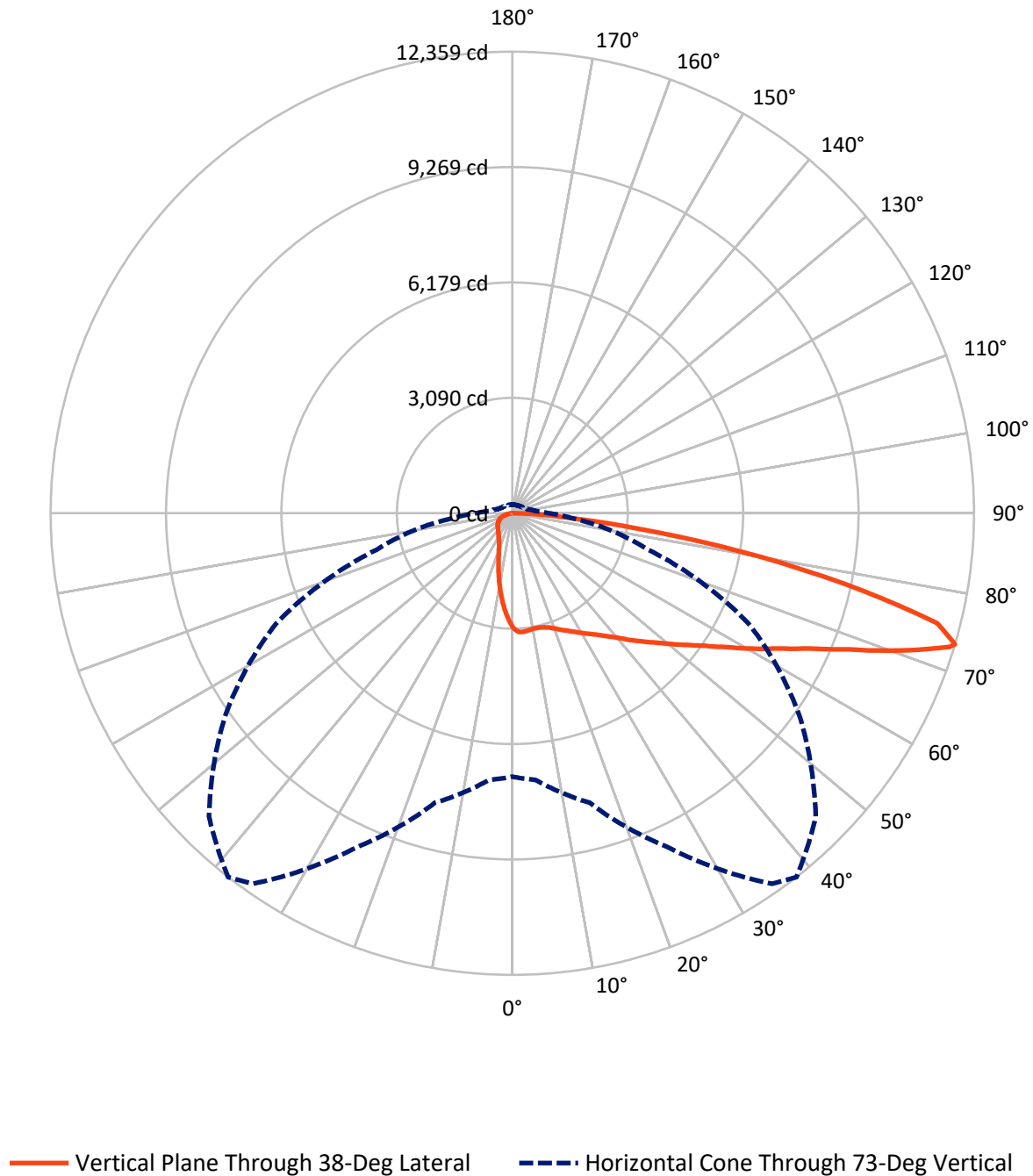
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Short - N/A

REPORT NUMBER: P453391
CATALOG NUMBER: GALN-SA4B-830-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P453391

CATALOG NUMBER: GALN-SA4B-830-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2353.7	0.0	2353.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	15155.3	0.0	15155.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	17509.0	0.0	17509.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.5	1.5
10°-20°	688.5	3.9
20°-30°	1072.2	6.1
30°-40°	1572.6	9.0
40°-50°	2332.8	13.3
50°-60°	3305.2	18.9
60°-70°	4192.7	23.9
70°-80°	3490.1	19.9
80°-90°	586.4	3.3
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°	17509.0	100.0
0°-180°	17509.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453391

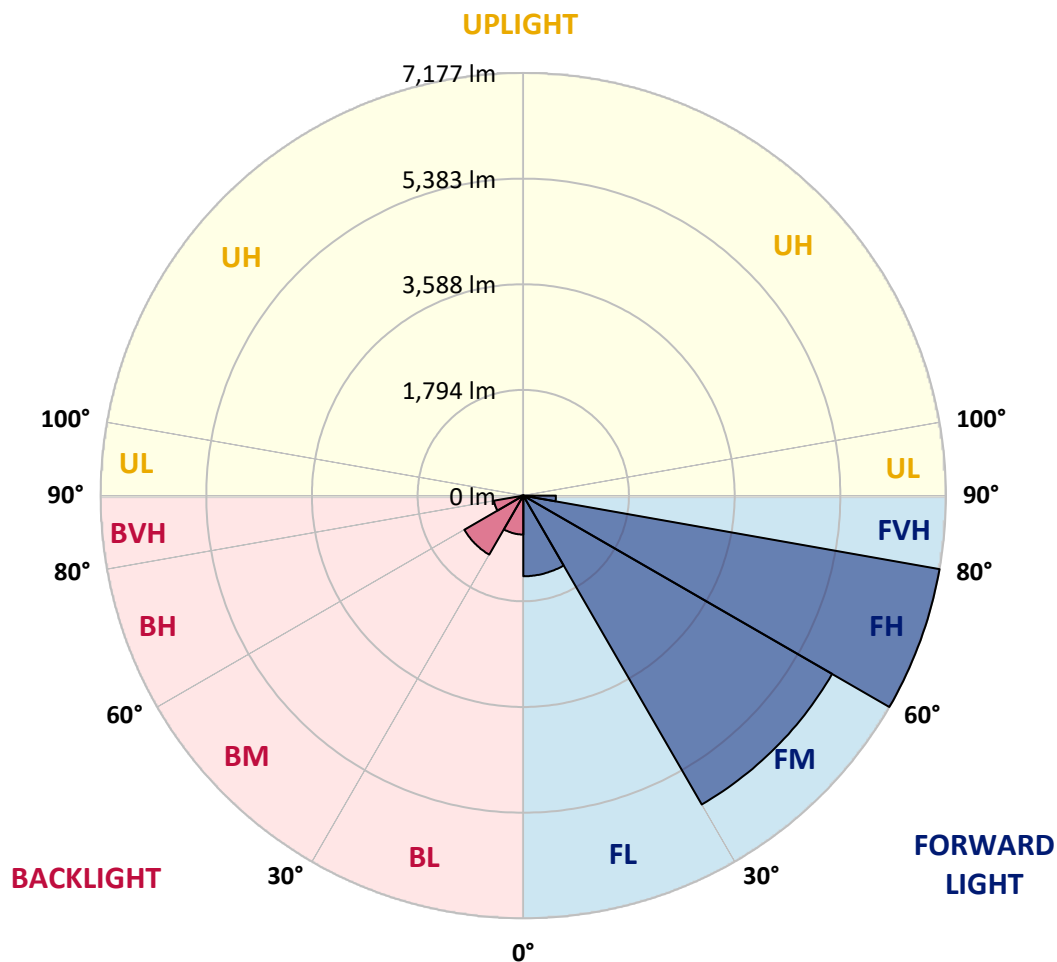
CATALOG NUMBER: GALN-SA4B-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1368.7	7.8			
FM	(30°-60°)	6055.1	34.6			
FH	(60°-80°)	7176.9	41.0			G3/7500
FVH	(80°-90°)	554.6	3.2			G4/750
BL	(0°-30°)	660.5	3.8	B2/1000		
BM	(30°-60°)	1155.5	6.6	B2/2500		
BH	(60°-80°)	505.9	2.9	B2/1000		G2/1000
BVH	(80°-90°)	31.8	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P453391

CATALOG NUMBER: GALN-SA4B-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0
2.5°	3199.6	3215.4	3207.5	3196.7	3189.7	3182.8	3172.9	3144.3	3121.5	3096.8	3058.2
5°	3223.4	3233.2	3226.3	3212.5	3196.7	3189.7	3171.0	3133.4	3096.8	3055.3	2997.9
7.5°	3209.5	3213.5	3205.6	3188.8	3174.9	3162.1	3140.3	3098.8	3054.3	3003.9	2928.7
10°	3160.1	3174.9	3174.9	3161.1	3147.2	3140.3	3118.6	3079.0	3038.5	2981.1	2892.1
12.5°	3119.5	3135.4	3148.2	3144.3	3143.3	3143.3	3126.5	3096.8	3049.3	2995.0	2889.2
15°	3091.9	3110.6	3138.3	3154.1	3164.0	3167.0	3160.1	3134.4	3085.9	3022.6	2901.0
17.5°	3085.9	3108.7	3159.1	3193.7	3219.4	3218.4	3216.4	3180.8	3127.5	3062.2	2915.9
20°	3112.6	3142.3	3212.5	3266.9	3304.4	3297.5	3286.6	3240.2	3177.9	3104.7	2929.7
22.5°	3192.7	3223.4	3300.5	3359.8	3396.4	3396.4	3363.8	3302.5	3236.2	3154.1	2948.5
25°	3307.4	3341.0	3423.1	3483.4	3500.2	3487.4	3454.7	3380.6	3304.4	3225.3	2988.0
27.5°	3447.8	3488.3	3564.5	3614.9	3610.0	3600.1	3566.5	3471.5	3395.4	3323.2	3055.3
30°	3622.8	3652.5	3731.6	3743.4	3725.7	3723.7	3676.2	3581.3	3510.1	3454.7	3151.2
32.5°	3787.9	3814.6	3877.9	3882.9	3851.2	3855.2	3810.7	3723.7	3683.1	3663.4	3312.3
35°	3963.0	3976.8	4031.2	4025.2	4004.5	4001.5	3983.7	3900.7	3913.5	3949.1	3540.8
37.5°	4109.3	4137.0	4167.6	4172.6	4171.6	4181.5	4193.3	4153.8	4227.9	4339.7	3840.3
40°	4243.8	4267.5	4313.0	4328.8	4367.4	4387.1	4427.7	4428.7	4599.7	4783.6	4209.2
42.5°	4334.7	4375.3	4460.3	4489.0	4582.9	4642.2	4702.5	4766.8	5015.0	5251.3	4644.2
45°	4413.8	4467.2	4608.6	4697.6	4825.2	4897.3	5024.9	5159.4	5516.3	5825.8	5086.2
47.5°	4533.5	4580.9	4743.1	4900.3	5093.1	5176.2	5367.0	5567.7	6034.4	6373.6	5509.4
50°	4699.6	4728.3	4893.4	5149.5	5395.7	5502.5	5754.6	6044.3	6588.1	6914.4	5881.1
52.5°	4912.2	4924.0	5055.5	5396.7	5721.0	5853.5	6187.7	6525.8	7072.6	7384.1	6175.8
55°	5163.3	5143.5	5246.4	5658.7	6092.7	6265.8	6624.7	7013.3	7617.4	7763.7	6390.4
57.5°	5411.5	5380.8	5462.9	5977.1	6551.5	6760.2	7178.4	7515.6	8103.9	8118.7	6540.7
60°	5674.5	5651.8	5749.6	6350.8	7114.1	7361.3	7747.9	8036.6	8574.5	8365.9	6564.4
62.5°	5944.4	5907.8	6047.3	6771.0	7747.9	7972.4	8347.1	8590.4	9036.3	8457.9	6336.0
65°	6206.5	6189.6	6405.2	7270.4	8469.7	8724.8	9088.7	9253.8	9406.1	8319.4	5769.4
67.5°	6485.3	6518.9	6863.0	7936.8	9411.0	9731.4	10123.9	9968.7	9511.9	7663.9	4858.8
70°	6910.4	6932.2	7464.2	8809.9	10624.2	11010.8	11200.7	10222.8	9001.7	6419.0	3652.5
72.5°	7093.4	7189.3	8001.1	9726.4	12002.6	12238.9	11562.6	9656.2	7498.8	4360.4	1919.2
73°	7052.8	7167.5	8025.8	9865.9	12110.3	12358.5	11485.4	9364.6	6970.8	3755.3	1645.3
75°	6547.6	6689.0	7704.4	9749.2	11900.7	11752.4	10245.5	7981.3	4710.5	1707.6	749.5
77.5°	5166.3	5206.8	6104.6	7872.5	9371.5	9096.6	7667.8	4988.3	1924.1	634.8	425.2
80°	2591.5	2740.8	3440.9	4509.7	6266.8	6176.8	4840.0	2359.2	801.9	372.8	281.8
82.5°	1246.8	1352.6	1675.9	2199.0	3462.6	3380.6	2396.8	1289.3	509.2	217.5	166.1
85°	802.9	882.0	1066.9	1049.1	1423.8	1359.5	1076.8	975.9	301.6	113.7	115.7
87.5°	530.0	580.4	696.1	556.7	518.1	468.7	475.6	549.8	59.3	43.5	15.8
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: P453391

CATALOG NUMBER: GALN-SA4B-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0	3076.0
2.5°	3042.4	3029.6	2987.0	2945.5	2906.0	2868.4	2843.7	2811.0	2789.3	2795.2	2804.1
5°	2966.3	2937.6	2862.5	2789.3	2720.1	2638.0	2571.8	2518.4	2477.8	2463.0	2460.0
7.5°	2886.2	2837.7	2730.0	2604.4	2486.7	2384.9	2267.2	2208.9	2140.7	2116.9	2109.0
10°	2837.7	2772.5	2621.2	2446.2	2269.2	2100.1	1972.6	1868.8	1774.8	1757.0	1748.1
12.5°	2823.9	2737.9	2534.2	2308.8	2073.4	1865.8	1676.9	1540.5	1449.5	1428.8	1398.1
15°	2816.0	2709.2	2453.1	2170.3	1871.7	1618.6	1419.9	1260.7	1177.6	1122.2	1123.2
17.5°	2809.1	2676.6	2362.1	2019.0	1697.7	1406.0	1186.5	1043.1	967.0	937.3	934.4
20°	2799.2	2638.0	2257.3	1859.9	1499.0	1212.2	1013.5	906.7	855.3	830.6	829.6
22.5°	2795.2	2600.4	2154.5	1697.7	1323.0	1062.9	898.8	823.6	791.0	774.2	774.2
25°	2805.1	2573.7	2046.7	1543.5	1166.7	935.4	819.7	768.3	749.5	740.6	737.6
27.5°	2835.8	2561.9	1939.9	1389.2	1023.4	848.4	766.3	730.7	716.9	709.9	710.9
30°	2894.1	2560.9	1835.1	1236.9	916.6	782.1	723.8	699.1	688.2	684.2	683.2
32.5°	2988.0	2582.6	1732.3	1111.4	826.6	726.7	684.2	666.4	661.5	658.5	657.5
35°	3147.2	2643.9	1630.5	996.7	757.4	677.3	646.6	637.8	630.8	633.8	634.8
37.5°	3361.8	2749.7	1533.6	906.7	705.0	640.7	615.0	607.1	603.1	606.1	609.1
40°	3649.5	2902.0	1452.5	834.5	667.4	610.1	587.3	580.4	576.4	581.4	582.4
42.5°	3966.9	3078.0	1385.3	778.2	636.8	584.4	562.6	554.7	551.7	554.7	555.7
45°	4293.2	3282.7	1350.6	737.6	611.1	565.6	542.8	533.9	527.0	525.0	528.0
47.5°	4614.5	3460.7	1349.7	712.9	590.3	548.8	524.0	514.2	505.3	500.3	499.3
50°	4876.6	3602.1	1373.4	702.0	572.5	530.0	505.3	495.4	483.5	473.6	475.6
52.5°	5074.3	3694.0	1384.3	697.1	562.6	510.2	485.5	476.6	462.7	449.9	449.9
55°	5201.9	3715.8	1357.6	692.1	554.7	489.4	462.7	454.8	441.0	428.1	428.1
57.5°	5245.4	3648.5	1261.7	680.3	546.8	471.6	440.0	433.1	422.2	409.3	407.4
60°	5144.5	3421.1	1093.6	644.7	531.0	452.9	415.3	412.3	408.4	397.5	396.5
62.5°	4755.9	2938.6	910.6	598.2	504.3	433.1	392.5	397.5	400.4	394.5	393.5
65°	4109.3	2385.9	778.2	533.9	468.7	405.4	367.8	380.7	388.6	388.6	386.6
67.5°	3333.1	1832.2	655.5	478.6	424.2	367.8	340.1	350.0	356.0	354.0	358.9
70°	2369.1	1240.9	533.9	415.3	367.8	325.3	304.5	304.5	300.6	298.6	298.6
72.5°	1148.9	708.9	433.1	347.1	313.4	277.8	261.0	254.1	246.2	245.2	240.3
73°	960.1	635.8	413.3	334.2	300.6	270.9	252.1	241.3	236.3	232.4	231.4
75°	584.4	482.5	345.1	281.8	256.1	233.3	216.5	206.7	201.7	198.7	197.8
77.5°	384.6	359.9	268.0	215.5	195.8	181.9	175.0	165.1	162.2	158.2	158.2
80°	286.7	274.9	191.8	152.3	140.4	128.5	126.6	124.6	116.7	111.7	109.8
82.5°	184.9	195.8	130.5	101.8	89.0	79.1	80.1	83.1	75.1	68.2	66.2
85°	131.5	141.4	79.1	46.5	37.6	32.6	36.6	32.6	33.6	26.7	21.8
87.5°	21.8	37.6	13.8	5.9	3.0	2.0	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)