

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: P454301

Luminaire Tested: **GALN-SA5B-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5B-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20773 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

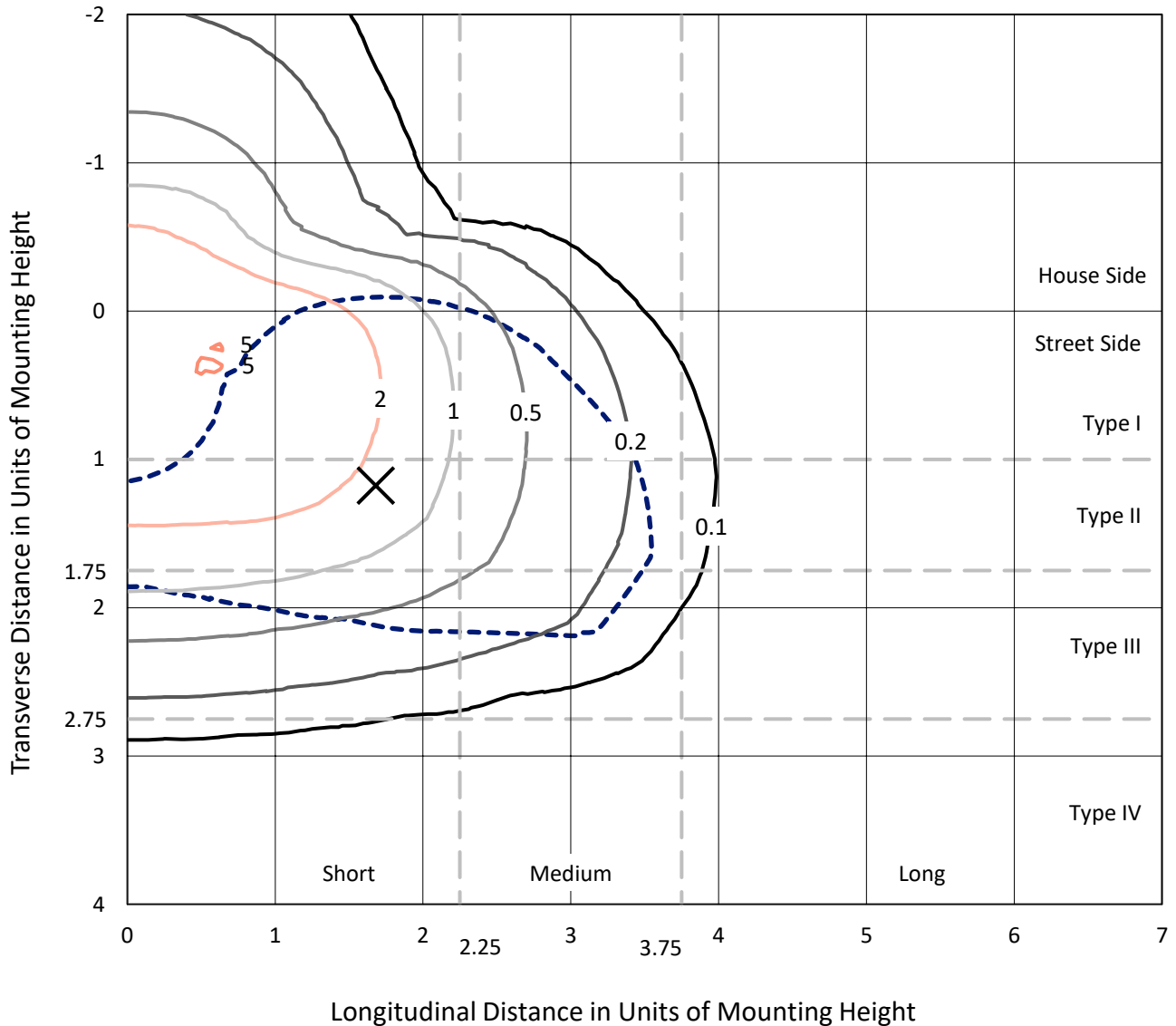
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

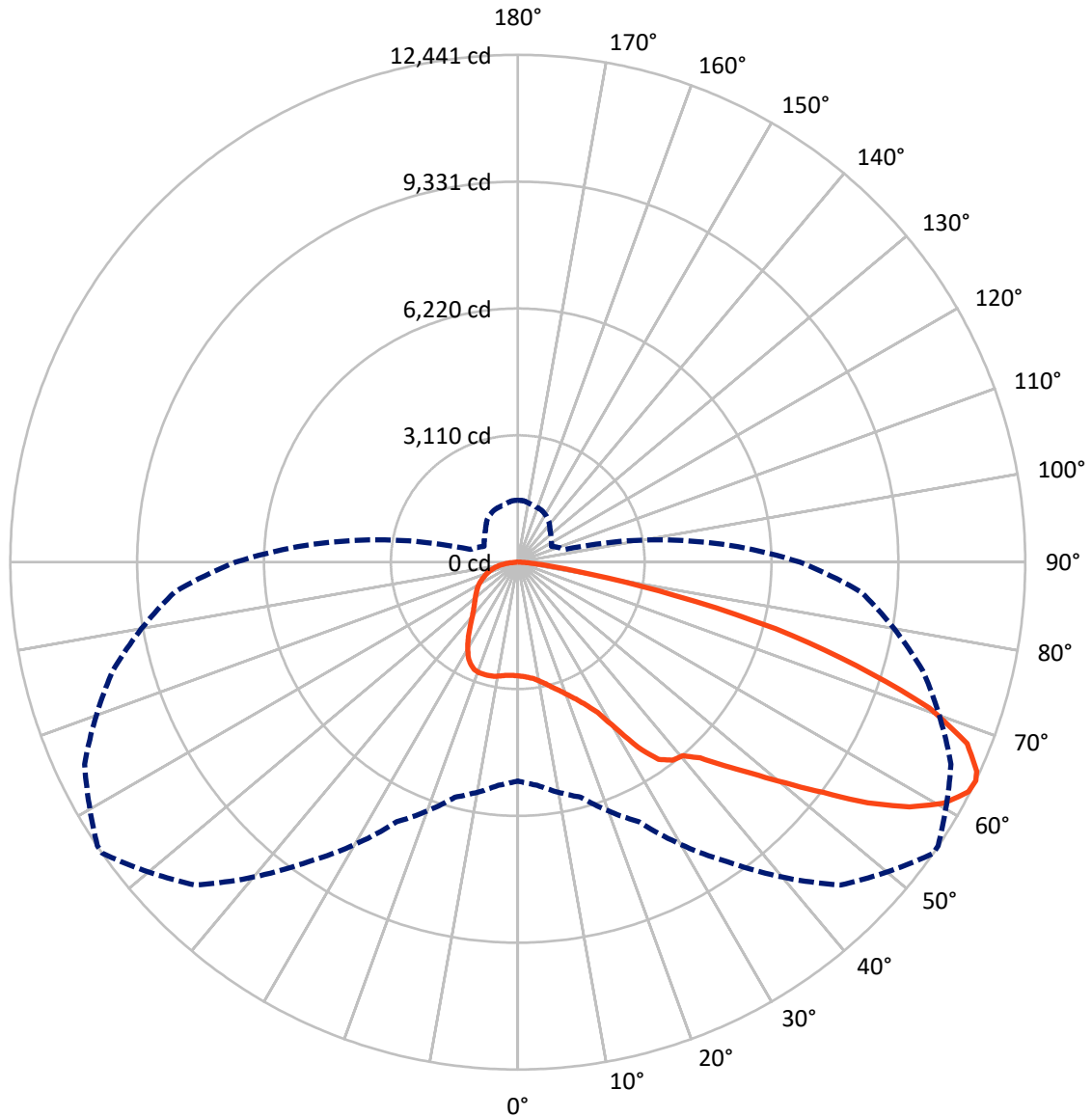
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5046.2	0.0	5046.2
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	15726.8	0.0	15726.8
	% Fixture	75.7	0.0	75.7
Total	Lumens	20773.0	0.0	20773.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.1	1.3
10°-20°	855.4	4.1
20°-30°	1522.9	7.3
30°-40°	2343.2	11.3
40°-50°	3321.6	16.0
50°-60°	4808.0	23.1
60°-70°	4975.7	24.0
70°-80°	2330.1	11.2
80°-90°	345.0	1.7
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°	20773.0	100.0
0°-180°	20773.0	100.0

Coefficient of Utilization



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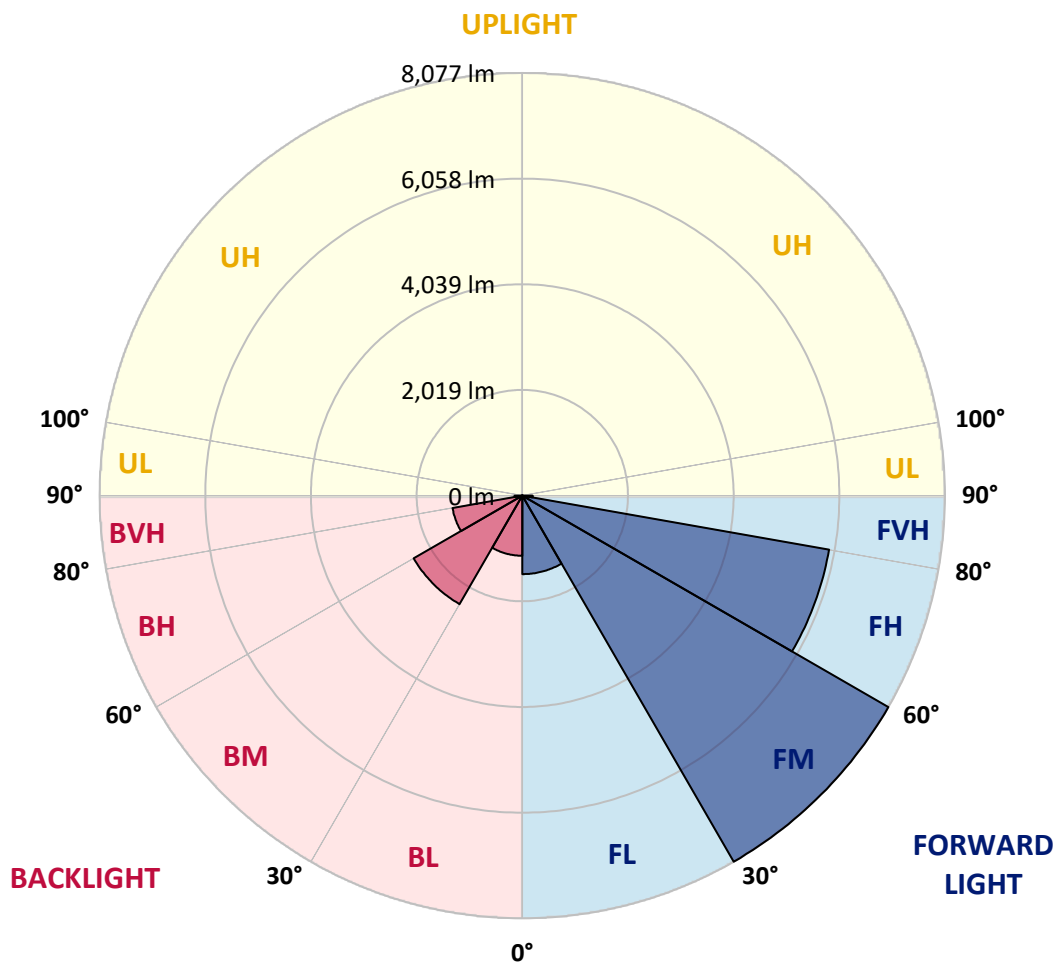
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1500.1	7.2			
FM	(30°-60°)	8077.1	38.9			
FH	(60°-80°)	5952.1	28.7			G3/7500
FVH	(80°-90°)	197.5	1.0			G2/225
BL	(0°-30°)	1149.3	5.5	B3/2500		
BM	(30°-60°)	2395.6	11.5	B2/2500		
BH	(60°-80°)	1353.8	6.5	B3/2500		G3/2500
BVH	(80°-90°)	147.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1
2.5°	2818.4	2817.2	2820.7	2817.2	2819.5	2811.4	2808.0	2810.3	2806.8	2801.0	2790.6
5°	2853.1	2852.0	2853.1	2848.5	2850.8	2846.2	2838.1	2840.4	2834.6	2821.8	2806.8
7.5°	2912.2	2907.5	2907.5	2906.4	2901.7	2894.8	2889.0	2886.7	2880.9	2864.7	2841.5
10°	2988.6	2988.6	2989.7	2980.5	2986.3	2973.5	2967.7	2966.6	2946.9	2926.1	2893.6
12.5°	3089.3	3095.1	3091.6	3087.0	3084.7	3080.1	3060.4	3065.0	3043.0	3007.1	2967.7
15°	3214.4	3223.6	3217.9	3215.5	3209.7	3192.4	3184.3	3180.8	3151.9	3099.7	3047.6
17.5°	3380.0	3368.4	3363.8	3358.0	3333.6	3320.9	3307.0	3304.7	3279.2	3217.9	3136.8
20°	3524.7	3540.9	3531.7	3525.9	3501.5	3477.2	3466.8	3463.3	3441.3	3374.2	3244.5
22.5°	3697.2	3700.7	3704.2	3690.3	3678.7	3660.2	3641.7	3635.9	3627.8	3558.3	3399.6
25°	3881.3	3895.2	3883.7	3869.8	3855.9	3854.7	3872.1	3869.8	3866.3	3799.1	3605.8
27.5°	4181.2	4194.0	4197.5	4182.4	4129.1	4133.8	4173.1	4185.9	4239.1	4128.0	3870.9
30°	4350.3	4363.0	4392.0	4448.7	4533.3	4607.4	4702.3	4731.3	4782.2	4572.6	4185.9
32.5°	4454.5	4459.1	4511.3	4616.6	4870.2	5146.9	5405.2	5415.6	5448.0	5153.9	4474.2
35°	4618.9	4622.4	4664.1	4779.9	5077.5	5538.3	5937.8	5950.5	5923.9	5334.5	4608.5
37.5°	4821.6	4830.8	4857.5	4953.6	5309.1	5866.0	6159.0	6149.7	5913.5	5478.1	4845.9
40°	5116.8	5116.8	5085.6	5215.3	5553.4	6053.6	6236.5	6220.3	6157.8	5893.8	5207.2
42.5°	5377.4	5372.7	5446.8	5534.8	5859.1	6343.1	6561.9	6588.6	6691.6	6416.0	5618.2
45°	5716.6	5737.5	5779.2	5939.0	6379.0	6837.5	7120.0	7145.5	7291.4	7030.9	6098.8
47.5°	6059.4	6066.3	6197.2	6410.2	7022.8	7507.9	7739.5	7781.2	7914.4	7749.9	6616.3
50°	6302.5	6368.6	6578.1	6913.9	7686.3	8325.4	8506.1	8555.9	8790.9	8532.7	7219.6
52.5°	6559.6	6624.5	6880.4	7392.2	8448.2	9161.5	9383.8	9417.4	9661.7	9324.7	7836.8
55°	6779.6	6839.8	7130.5	7815.9	9054.9	10014.8	10417.8	10378.4	10495.4	9934.9	8312.7
57.5°	6815.5	6864.1	7230.0	8086.9	9511.1	10746.6	11324.4	11347.6	11212.1	10391.2	8705.2
60°	6537.6	6637.2	7057.5	8058.0	9716.1	11256.1	12000.7	12016.9	11632.4	10625.1	8861.5
62.5°	6045.5	6035.1	6543.4	7592.5	9428.9	11371.9	12399.0	12381.6	11796.9	10512.7	8709.9
64°	5365.8	5490.8	5965.6	7020.5	8965.8	11193.6	12440.7	12431.4	11718.1	10278.8	8451.6
65°	4951.3	4944.3	5413.3	6552.7	8504.9	10925.0	12366.6	12353.8	11553.7	10069.3	8251.3
67.5°	3574.5	3590.7	4053.9	5056.6	6913.9	9874.7	11883.7	11836.2	10905.3	9374.5	7489.4
70°	2165.3	2174.6	2538.2	3354.5	4962.8	7982.7	10711.9	10714.2	9912.9	8337.0	6374.3
72.5°	1140.5	1164.9	1310.8	1904.8	3014.1	5600.9	8690.2	8896.3	8510.7	7115.4	5035.8
75°	634.5	638.0	741.1	939.1	1537.7	3134.5	6531.8	6590.9	6737.9	5727.1	3723.9
77.5°	484.0	491.0	523.4	606.7	837.2	1453.2	3953.1	4249.6	4748.6	4037.7	2124.8
80°	392.5	399.5	427.3	477.1	557.0	689.0	1836.5	1996.3	2541.6	1792.5	829.1
82.5°	305.7	301.1	337.0	369.4	405.3	407.6	753.8	833.7	1035.2	771.2	359.0
85°	227.0	227.0	255.9	249.0	261.7	238.5	332.3	367.1	414.5	327.7	166.7
87.5°	90.3	99.6	167.9	150.5	116.9	93.8	122.7	129.7	143.6	128.5	69.5
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°	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1	2787.1
2.5°	2791.7	2795.2	2787.1	2781.3	2779.0	2775.5	2772.1	2773.2	2777.8	2782.5	2781.3
5°	2805.6	2806.8	2792.9	2786.0	2781.3	2776.7	2776.7	2780.2	2789.4	2796.4	2796.4
7.5°	2840.4	2840.4	2820.7	2808.0	2801.0	2792.9	2790.6	2791.7	2798.7	2808.0	2809.1
10°	2894.8	2890.2	2864.7	2845.0	2832.3	2812.6	2795.2	2786.0	2789.4	2795.2	2795.2
12.5°	2960.8	2948.1	2915.6	2889.0	2857.7	2820.7	2784.8	2766.3	2765.1	2770.9	2768.6
15°	3031.4	3017.5	2972.4	2923.7	2869.3	2814.9	2772.1	2745.4	2724.6	2718.8	2731.5
17.5°	3113.6	3084.7	3022.2	2955.0	2874.0	2803.3	2736.2	2681.7	2644.7	2634.3	2637.7
20°	3213.2	3175.0	3090.5	2985.1	2870.5	2761.6	2657.4	2584.5	2524.3	2505.7	2508.1
22.5°	3351.0	3285.0	3161.1	3000.2	2841.5	2682.9	2538.2	2443.2	2370.3	2341.3	2358.7
25°	3507.3	3435.5	3228.3	2996.7	2766.3	2556.7	2396.9	2273.0	2207.0	2164.1	2173.4
27.5°	3722.7	3595.3	3300.1	2965.4	2658.6	2402.7	2217.4	2100.5	2040.3	2018.3	2028.7
30°	3998.3	3802.6	3377.6	2880.9	2488.4	2208.2	2036.8	1960.4	1924.5	1896.7	1905.9
32.5°	4197.5	3948.5	3395.0	2738.5	2304.3	2031.0	1914.0	1857.3	1817.9	1791.3	1797.1
35°	4339.9	4072.4	3386.9	2563.6	2112.0	1885.1	1816.8	1770.5	1706.8	1648.9	1638.5
37.5°	4530.9	4227.6	3327.9	2372.6	1922.1	1786.7	1738.0	1652.3	1560.9	1483.3	1479.8
40°	4823.9	4409.4	3201.6	2147.9	1760.0	1713.7	1654.7	1543.5	1445.1	1382.6	1377.9
42.5°	5126.1	4577.3	3030.3	1911.7	1626.9	1637.3	1565.5	1455.5	1395.3	1354.8	1350.1
45°	5495.5	4759.0	2845.0	1706.8	1528.5	1565.5	1487.9	1424.2	1388.3	1361.7	1354.8
47.5°	5895.0	4945.5	2636.6	1522.7	1445.1	1499.5	1455.5	1426.6	1406.9	1388.3	1380.2
50°	6325.7	5153.9	2440.9	1374.4	1369.8	1431.2	1452.0	1441.6	1430.0	1424.2	1417.3
52.5°	6798.1	5367.0	2276.5	1270.2	1303.8	1382.6	1453.2	1461.3	1461.3	1457.8	1453.2
55°	7117.7	5515.2	2109.7	1185.7	1236.7	1343.2	1450.9	1482.1	1493.7	1489.1	1484.5
57.5°	7353.9	5596.2	1900.1	1112.8	1179.9	1305.0	1438.1	1484.5	1496.0	1501.8	1499.5
60°	7402.6	5521.0	1625.7	1036.3	1118.5	1249.4	1391.8	1449.7	1464.8	1500.7	1504.1
62.5°	7183.7	5289.4	1352.4	961.1	1043.3	1164.9	1329.3	1410.3	1440.5	1496.0	1501.8
64°	6915.1	5030.0	1200.8	913.6	994.7	1117.4	1298.0	1399.9	1439.3	1513.4	1518.0
65°	6718.2	4841.3	1105.8	883.5	963.4	1086.1	1280.7	1403.4	1449.7	1540.0	1547.0
67.5°	5993.4	4191.7	914.8	812.9	889.3	1032.9	1284.1	1432.3	1447.4	1550.5	1549.3
70°	4959.4	3337.1	766.5	748.0	817.5	990.0	1270.2	1386.0	1387.2	1455.5	1439.3
72.5°	3713.4	2466.4	664.6	680.9	737.6	888.1	1199.6	1323.5	1303.8	1313.1	1296.9
75°	2550.9	1631.5	572.0	609.1	654.2	785.1	1100.0	1201.9	1170.7	1159.1	1147.5
77.5°	1361.7	902.0	475.9	538.4	568.5	678.5	959.9	1058.3	1025.9	980.8	965.7
80°	551.2	425.0	383.3	445.8	463.2	546.5	799.0	860.3	836.0	757.3	731.8
82.5°	276.7	254.7	301.1	350.8	352.0	390.2	594.0	651.9	597.5	501.4	479.4
85°	144.7	149.4	207.3	246.6	217.7	210.7	356.6	394.9	362.4	315.0	283.7
87.5°	52.1	60.2	108.8	107.7	76.4	40.5	78.7	38.2	20.8	12.7	16.2
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)