

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: P453696

Luminaire Tested: **GALN-SA4D-727-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-727-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25537 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

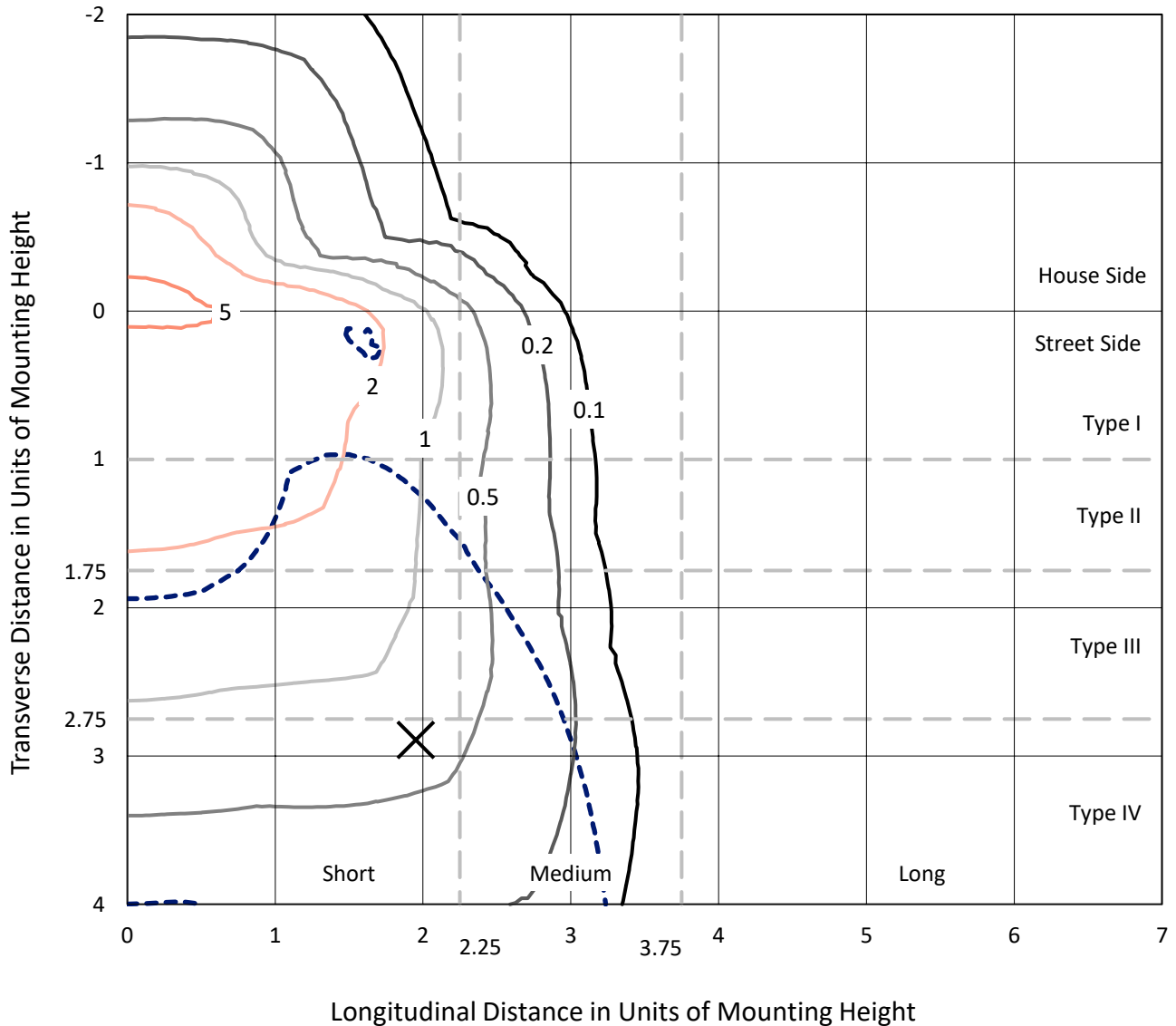
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P453696
 CATALOG NUMBER: GALN-SA4D-727-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

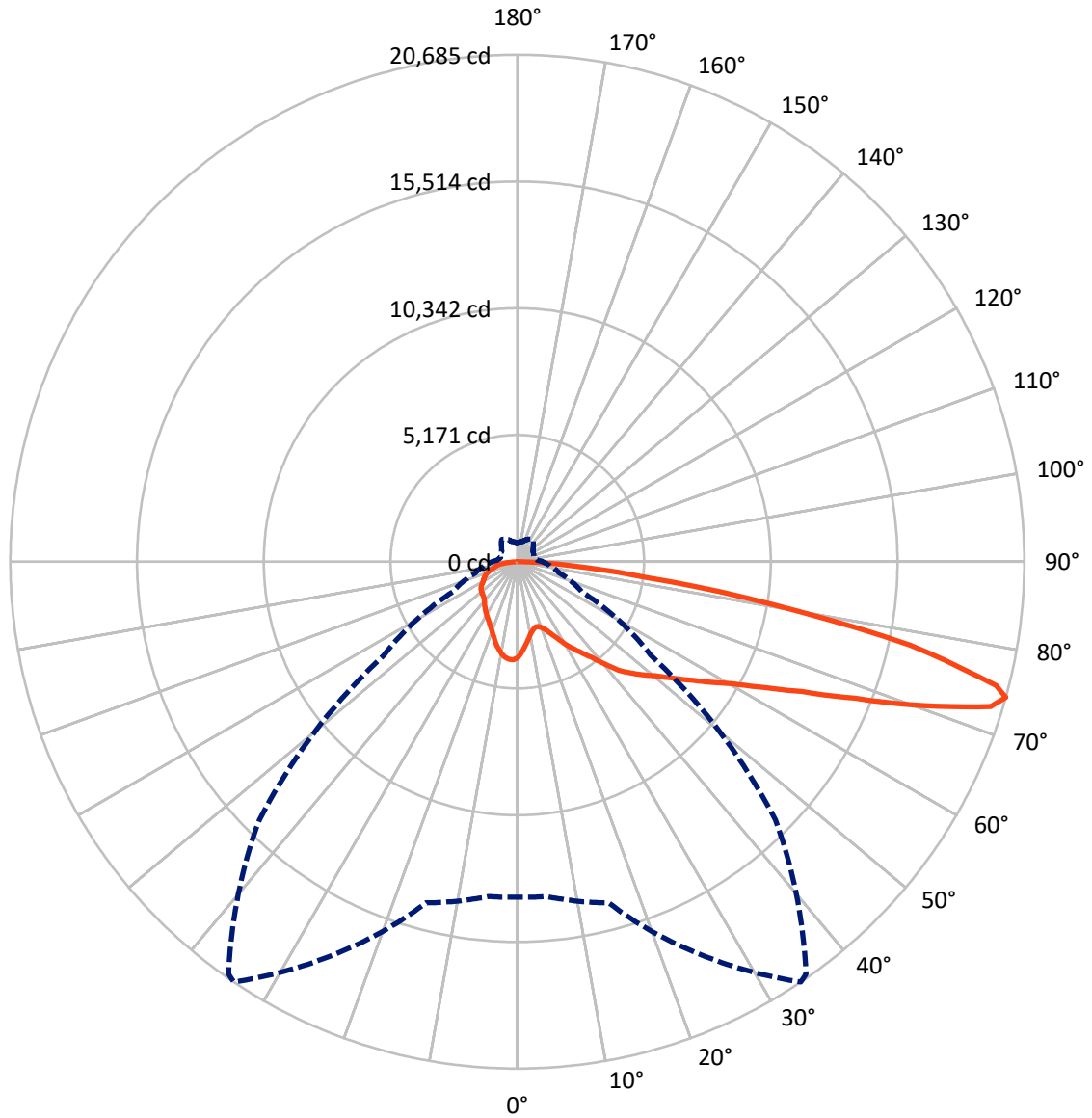
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - N/A

REPORT NUMBER: P453696
CATALOG NUMBER: GALN-SA4D-727-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P453696

CATALOG NUMBER: GALN-SA4D-727-U-T4FT

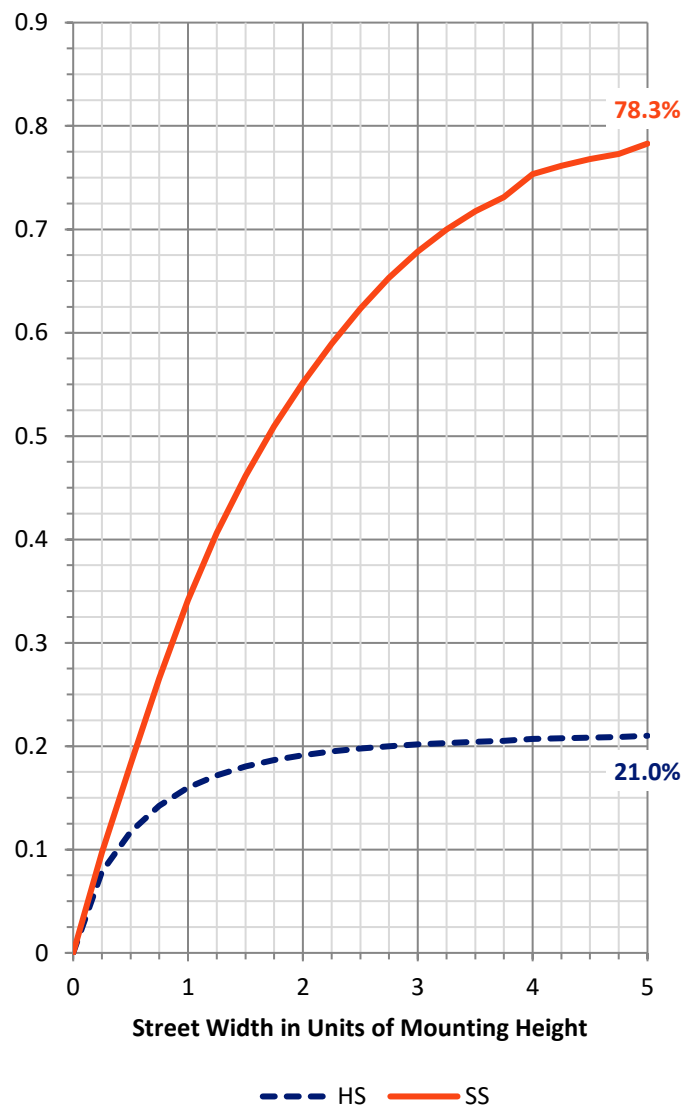
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5434.5	0.0	5434.5
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	20102.5	0.0	20102.5
	% Fixture	78.7	0.0	78.7
Total	Lumens	25537.0	0.0	25537.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.6	1.4
10°-20°	970.7	3.8
20°-30°	1600.4	6.3
30°-40°	2397.2	9.4
40°-50°	3485.0	13.6
50°-60°	4867.6	19.1
60°-70°	6094.0	23.9
70°-80°	5039.3	19.7
80°-90°	728.1	2.9
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°	25537.0	100.0
0°-180°	25537.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453696

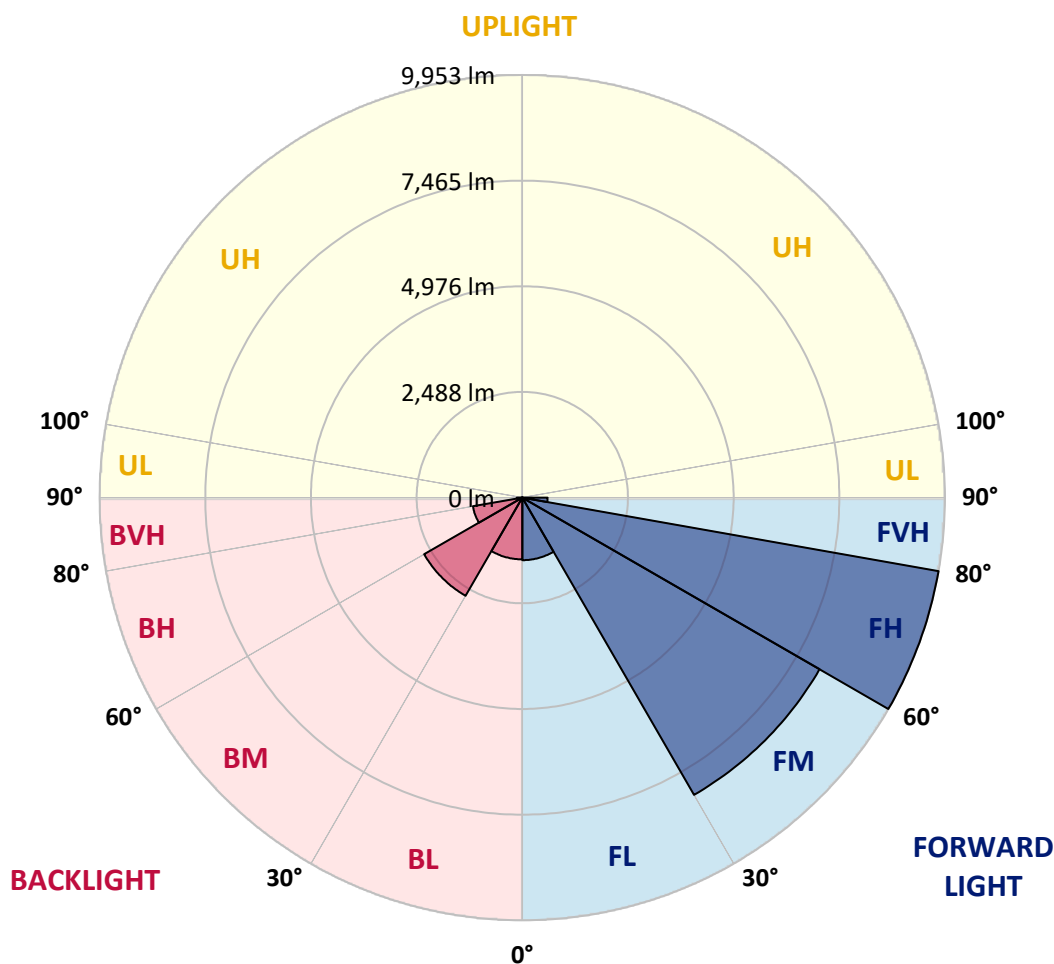
CATALOG NUMBER: GALN-SA4D-727-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1472.1	5.8			
FM (30°-60°)	8081.0	31.6			
FH (60°-80°)	9953.0	39.0			G4/12000
FVH (80°-90°)	596.5	2.3			G4/750
BL (0°-30°)	1453.6	5.7	B3/2500		
BM (30°-60°)	2668.9	10.5	B3/5000		
BH (60°-80°)	1180.3	4.6	B3/2500		G3/2500
BVH (80°-90°)	131.6	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





REPORT NUMBER: P453696

CATALOG NUMBER: GALN-SA4D-727-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0
2.5°	3603.3	3621.7	3631.6	3667.0	3675.5	3686.8	3716.5	3756.1	3807.0	3852.3	3891.9
5°	3303.4	3331.7	3348.7	3379.8	3440.6	3446.3	3525.5	3616.0	3719.3	3815.5	3894.8
7.5°	3019.0	3050.2	3064.3	3120.9	3201.5	3214.3	3330.3	3473.2	3645.8	3791.5	3913.1
10°	2805.4	2821.0	2852.1	2894.5	2990.7	2999.2	3150.6	3341.6	3565.1	3780.2	3944.3
12.5°	2689.4	2697.9	2705.0	2750.2	2845.0	2857.8	3016.2	3232.7	3501.5	3788.6	3995.2
15°	2706.4	2709.2	2678.1	2686.6	2763.0	2781.4	2938.4	3160.5	3461.8	3809.9	4071.6
17.5°	2849.3	2839.4	2763.0	2723.4	2777.1	2785.6	2922.8	3132.2	3443.5	3849.5	4150.8
20°	3074.2	3060.1	2928.5	2840.8	2871.9	2879.0	2973.8	3153.4	3461.8	3914.6	4273.9
22.5°	3354.3	3348.7	3149.2	3043.1	3041.7	3091.2	3229.8	3517.0	4003.7	4402.6	
25°	3746.2	3716.5	3456.2	3319.0	3280.8	3277.9	3272.3	3355.7	3587.8	4098.5	4555.4
27.5°	4148.0	4097.1	3865.0	3654.2	3572.2	3562.3	3525.5	3534.0	3678.3	4206.0	4729.4
30°	4508.7	4476.2	4258.3	4024.9	3927.3	3904.7	3802.8	3756.1	3829.7	4399.8	5006.7
32.5°	4784.6	4764.8	4595.0	4382.8	4238.5	4234.3	4085.7	4047.5	4065.9	4634.7	5323.6
35°	5008.1	5015.2	4928.9	4745.0	4579.5	4555.4	4456.4	4408.3	4354.5	4974.2	5722.6
37.5°	5313.7	5329.3	5323.6	5165.2	4962.9	4968.5	4945.9	4866.7	4723.8	5353.3	6165.4
40°	5650.4	5661.7	5660.3	5599.5	5493.4	5499.1	5490.6	5400.0	5186.4	5835.8	6657.7
42.5°	6115.9	6062.1	5922.1	5982.9	6045.1	6072.0	6130.0	6043.7	5750.9	6350.7	7120.3
45°	6636.5	6534.6	6217.7	6246.0	6476.6	6527.6	6847.3	6728.5	6363.5	6942.1	7665.0
47.5°	6964.7	6864.3	6596.9	6591.2	6896.8	6946.3	7512.2	7468.4	6920.9	7580.1	8329.9
50°	7257.6	7243.4	6942.1	7014.2	7312.7	7386.3	8236.6	8195.5	7476.8	8332.8	9054.3
52.5°	7691.9	7577.3	7336.8	7485.3	7880.0	7976.2	8955.2	8835.0	7987.6	8997.7	9757.4
55°	7887.1	7860.2	7846.1	7974.8	8516.7	8586.0	9654.1	9378.2	8423.3	9560.7	10292.2
57.5°	8409.2	8359.6	8499.7	8587.4	9266.5	9372.6	10384.1	9945.5	8805.3	10007.8	10552.5
60°	9085.4	9058.5	9187.3	9345.7	10104.0	10265.3	11216.0	10429.4	9112.3	10232.7	10409.6
62.5°	10095.5	10092.7	10068.6	10408.2	11291.0	11439.5	12170.9	10900.5	9160.4	10064.4	9671.1
65°	11544.2	11493.3	11283.9	11654.5	12767.9	12941.9	13165.5	11163.6	8870.4	9200.0	8143.2
67.5°	13059.4	13056.5	12886.8	13367.8	14888.6	15068.3	14409.0	11105.6	8065.4	7452.8	5783.4
70°	14315.6	14254.8	14471.3	15753.0	17597.8	17805.8	15496.9	10422.3	6424.3	4921.8	3436.4
72.5°	14617.0	14619.8	15069.7	17592.2	20199.5	20232.0	15888.8	8447.4	4299.4	2714.9	1718.9
74°	13688.9	13713.0	14410.4	17684.1	20684.8	20537.6	14887.2	6639.3	2907.3	1772.7	1239.3
75°	12494.9	12343.5	13352.2	17071.5	20181.1	20022.7	13714.4	5327.9	2218.3	1416.1	1085.1
77.5°	6680.4	6834.6	8390.8	12739.6	16395.3	16212.8	9299.0	2555.0	1198.3	986.1	780.9
80°	2378.2	2622.9	3686.8	6666.2	10511.4	10568.0	4438.0	1171.4	843.2	727.2	551.7
82.5°	970.5	997.4	1583.1	2958.2	5337.8	5388.7	1812.3	696.0	602.7	500.8	329.6
85°	379.1	390.5	700.3	1329.8	2277.7	2426.3	626.7	367.8	370.7	287.2	168.4
87.5°	127.3	144.3	287.2	442.8	773.9	758.3	182.5	108.9	133.0	124.5	52.3
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: P453696
 CATALOG NUMBER: GALN-SA4D-727-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0	3899.0
2.5°	3911.7	3938.6	3957.0	3976.8	3995.2	4000.9	3996.6	4009.3	4010.8	4012.2	4013.6
5°	3934.4	3971.1	4006.5	4026.3	4034.8	4027.7	4003.7	3991.0	3979.6	3971.1	3974.0
7.5°	3965.5	4017.8	4050.4	4058.9	4036.2	4003.7	3944.3	3897.6	3867.9	3848.1	3846.6
10°	4013.6	4064.5	4091.4	4067.3	4005.1	3925.9	3832.5	3744.8	3678.3	3658.5	3657.1
12.5°	4074.4	4132.4	4131.0	4060.3	3951.3	3809.9	3658.5	3556.6	3466.1	3420.8	3439.2
15°	4153.6	4197.5	4156.5	4029.1	3856.6	3662.7	3476.0	3337.3	3235.5	3187.4	3190.2
17.5°	4245.6	4283.8	4174.9	3974.0	3723.6	3474.6	3258.1	3126.6	3045.9	3010.5	3007.7
20°	4360.2	4371.5	4174.9	3877.8	3552.4	3255.3	3048.7	2956.8	2911.5	2893.1	2898.8
22.5°	4483.3	4460.6	4152.2	3742.0	3327.4	3026.1	2887.5	2846.4	2823.8	2821.0	2823.8
25°	4621.9	4558.3	4105.5	3558.0	3092.6	2828.0	2747.4	2754.5	2758.7	2758.7	2768.6
27.5°	4791.7	4664.4	4027.7	3326.0	2818.1	2644.1	2621.5	2671.0	2693.6	2697.9	2705.0
30°	5015.2	4780.4	3899.0	3036.0	2584.7	2478.6	2518.2	2584.7	2610.2	2625.7	2622.9
32.5°	5281.2	4907.7	3725.0	2746.0	2396.6	2362.6	2410.7	2478.6	2506.9	2515.4	2504.1
35°	5593.8	5052.0	3495.8	2474.4	2232.4	2252.2	2308.8	2330.1	2355.5	2355.5	2361.2
37.5°	5930.5	5168.0	3215.7	2225.4	2105.1	2177.3	2218.3	2198.5	2187.2	2173.0	2180.1
40°	6272.9	5254.3	2852.1	1979.2	1977.8	2099.5	2110.8	2054.2	2008.9	1994.8	1987.7
42.5°	6571.4	5308.1	2523.9	1788.2	1857.5	2023.1	2031.6	1941.0	1868.9	1826.4	1812.3
45°	6923.7	5370.3	2202.7	1629.8	1745.8	1962.2	1983.5	1861.8	1755.7	1666.6	1643.9
47.5°	7406.1	5511.8	1949.5	1506.7	1665.1	1924.0	1953.7	1796.7	1656.6	1540.6	1522.2
50°	7950.8	5705.6	1752.9	1423.2	1602.9	1890.1	1926.9	1730.2	1564.7	1436.0	1421.8
52.5°	8450.2	5810.3	1583.1	1348.2	1542.1	1827.8	1891.5	1682.1	1474.1	1331.3	1318.5
55°	8723.2	5640.5	1416.1	1274.7	1458.6	1747.2	1842.0	1615.6	1386.4	1276.1	1257.7
57.5°	8760.0	5289.7	1264.8	1195.4	1370.9	1648.2	1750.0	1535.0	1329.8	1237.9	1222.3
60°	8475.6	4766.2	1147.3	1130.4	1281.7	1536.4	1646.7	1464.2	1271.8	1195.4	1179.9
62.5°	7768.3	4197.5	1065.3	1071.0	1191.2	1419.0	1570.3	1396.3	1216.7	1148.8	1134.6
65°	6551.6	3464.7	986.1	1010.1	1110.6	1327.0	1501.0	1339.7	1161.5	1113.4	1100.7
67.5°	4551.2	2501.2	921.0	946.5	1034.2	1233.6	1420.4	1278.9	1099.2	1073.8	1054.0
70°	2519.6	1539.2	844.6	874.3	954.9	1129.0	1329.8	1187.0	1008.7	997.4	969.1
72.5°	1324.2	980.4	758.3	790.8	847.4	994.6	1191.2	1086.5	919.6	871.5	834.7
74°	1034.2	803.6	700.3	734.2	772.4	915.3	1109.1	1014.4	855.9	799.3	771.0
75°	901.2	715.9	650.8	694.6	728.6	861.6	1045.5	963.4	820.5	766.8	741.3
77.5°	636.6	536.2	531.9	584.3	602.7	755.5	942.2	877.1	731.4	674.8	650.8
80°	447.1	401.8	421.6	454.1	479.6	667.8	874.3	758.3	599.8	533.4	524.9
82.5°	291.4	263.1	301.3	331.0	339.5	492.3	706.0	575.8	437.2	355.1	329.6
85°	134.4	131.6	172.6	168.4	166.9	240.5	418.8	336.7	251.8	188.2	176.8
87.5°	34.0	32.5	42.4	35.4	42.4	36.8	38.2	9.9	1.4	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)