

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: P454750

Luminaire Tested: **GALN-SA5D-827-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-827-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28427 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

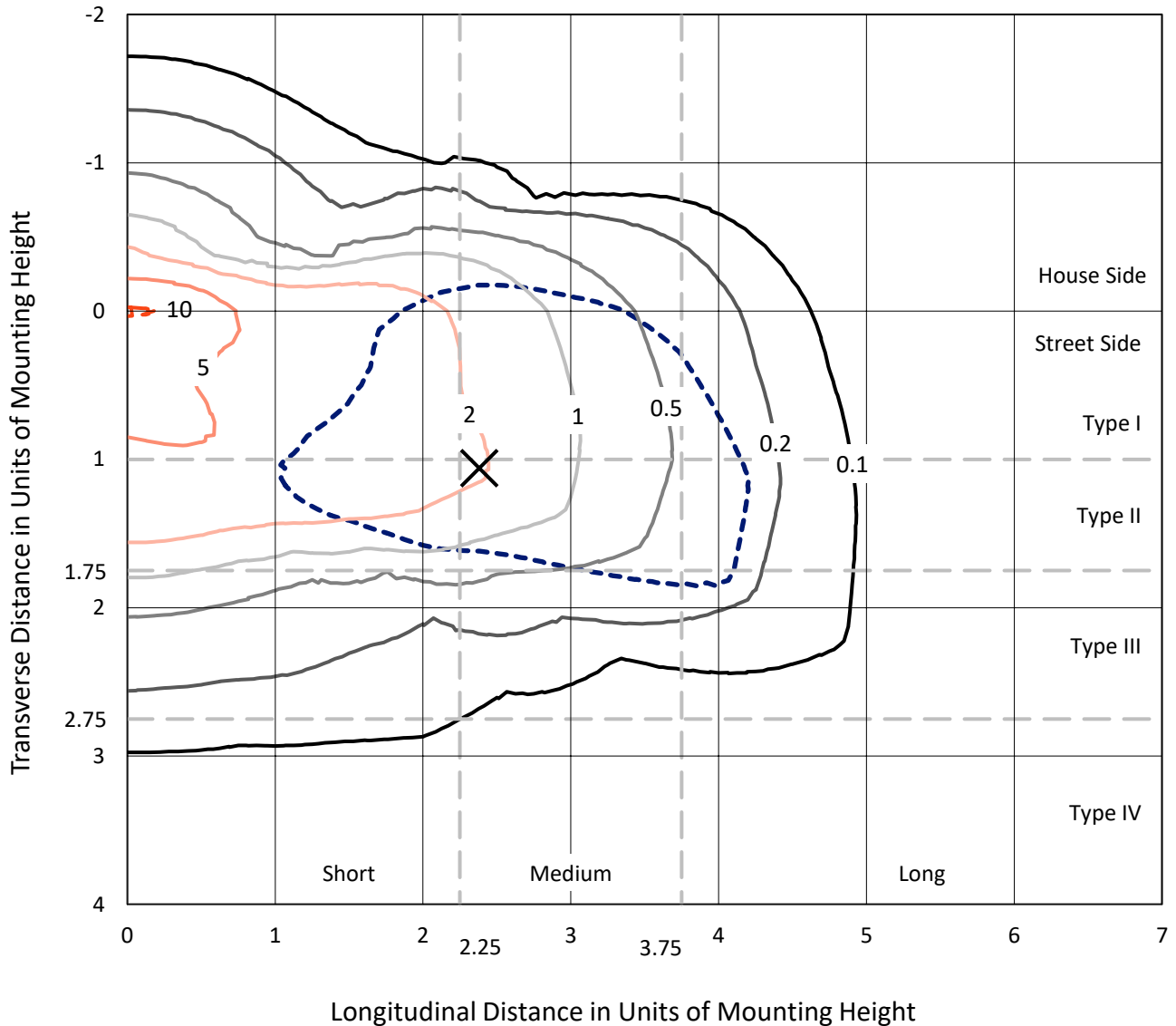
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P454750
 CATALOG NUMBER: GALN-SA5D-827-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

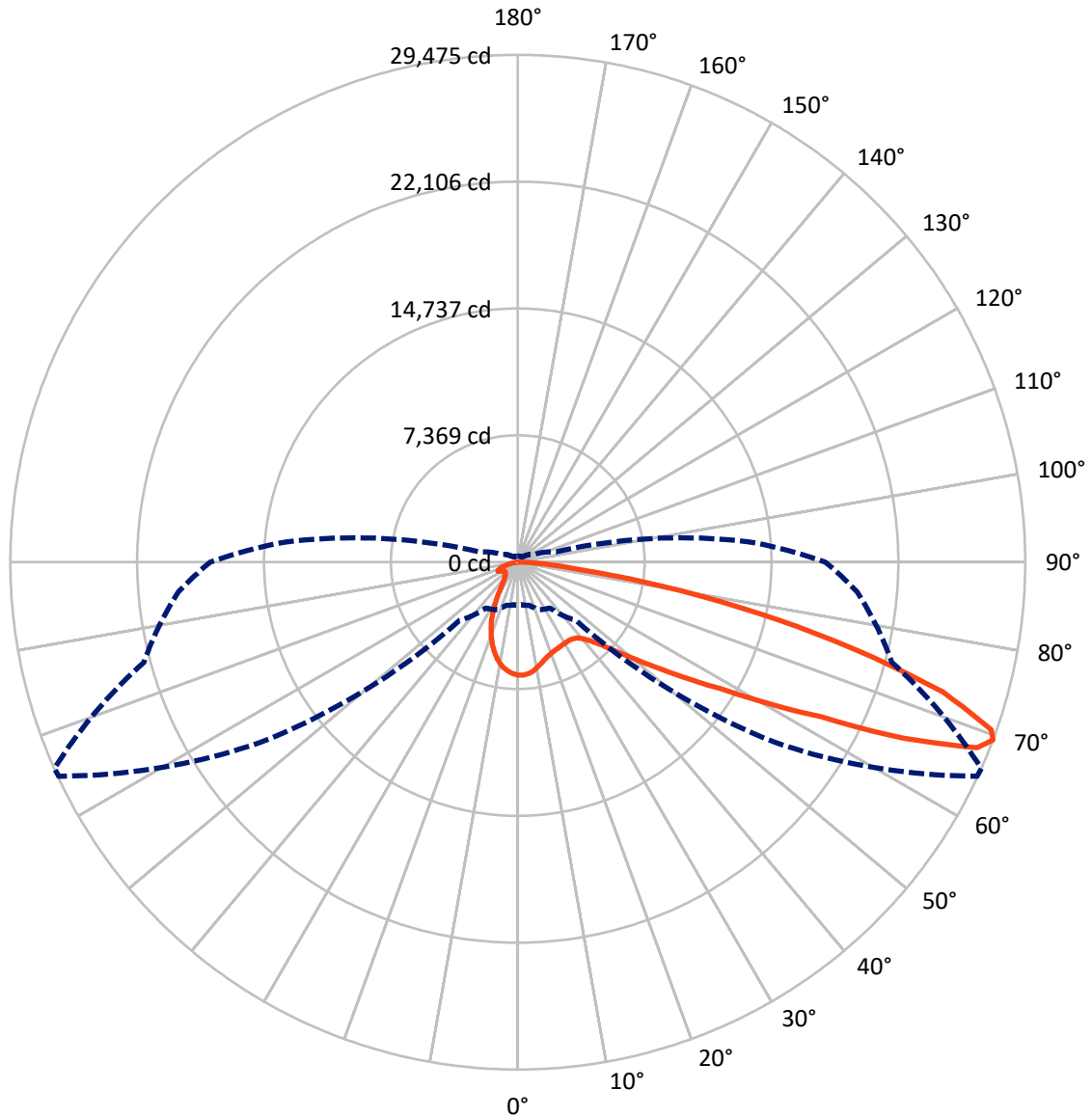
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P454750
CATALOG NUMBER: GALN-SA5D-827-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P454750

CATALOG NUMBER: GALN-SA5D-827-U-SL2

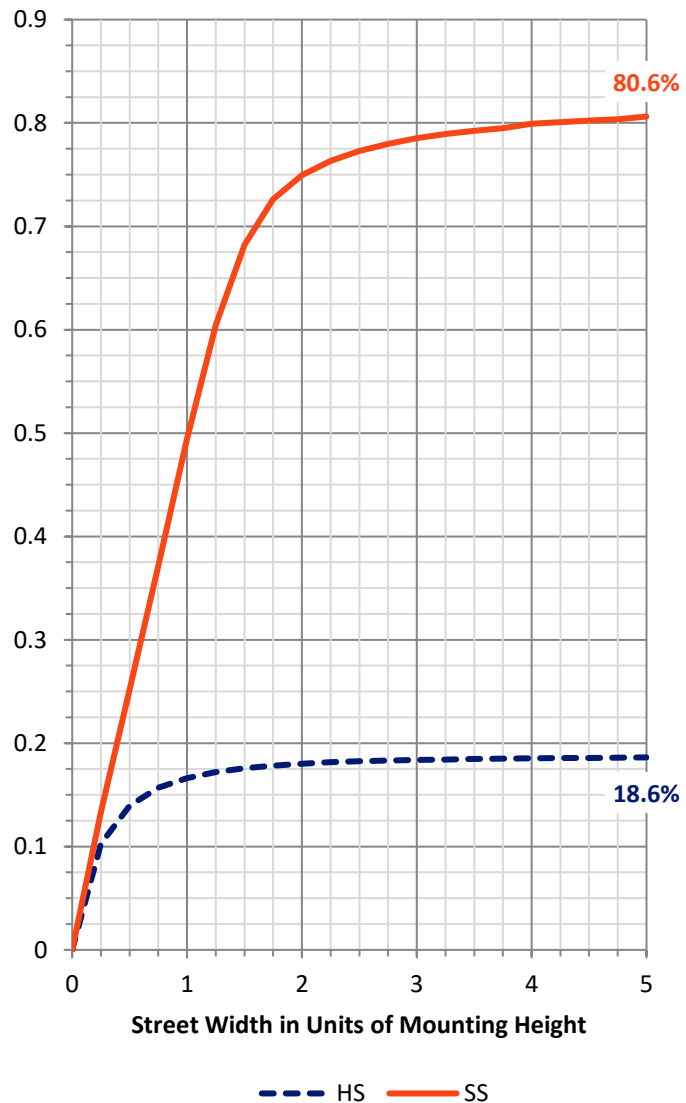
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5346.0	0.0	5346.0
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	23080.9	0.0	23080.9
	% Fixture	81.2	0.0	81.2
Total	Lumens	28427.0	0.0	28427.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	570.1	2.0
10°-20°	1352.1	4.8
20°-30°	1840.8	6.5
30°-40°	2473.6	8.7
40°-50°	3693.5	13.0
50°-60°	5875.1	20.7
60°-70°	7226.0	25.4
70°-80°	4701.6	16.5
80°-90°	694.3	2.4
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°	28427.0	100.0
0°-180°	28427.0	100.0



REPORT NUMBER: P454750

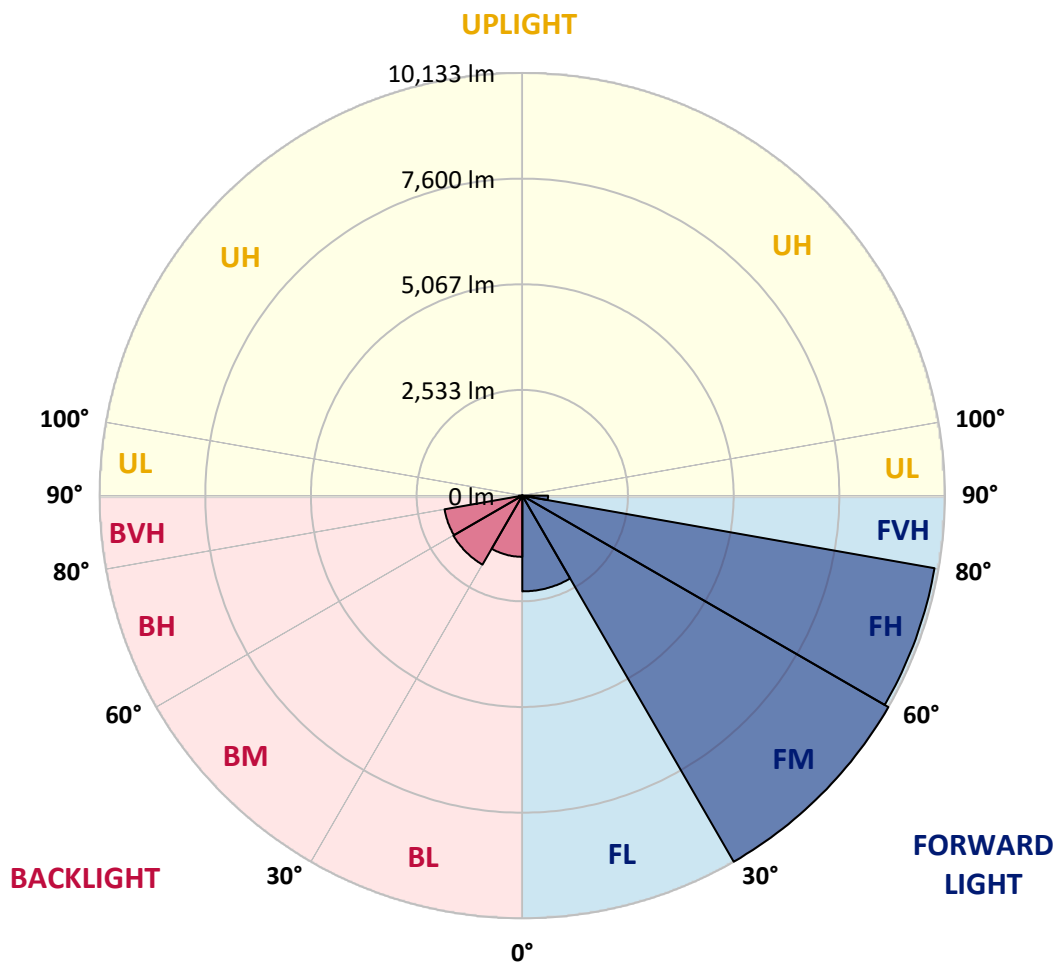
CATALOG NUMBER: GALN-SA5D-827-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2295.4	8.1			
FM	(30°-60°)	10133.4	35.6			
FH	(60°-80°)	10034.9	35.3			G4/12000
FVH	(80°-90°)	617.3	2.2			G4/750
BL	(0°-30°)	1467.5	5.2	B3/2500		
BM	(30°-60°)	1908.8	6.7	B2/2500		
BH	(60°-80°)	1892.7	6.7	B3/2500		G3/2500
BVH	(80°-90°)	77.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





REPORT NUMBER: P454750

CATALOG NUMBER: GALN-SA5D-827-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6
2.5°	6334.7	6359.9	6388.3	6419.8	6479.6	6512.6	6536.2	6563.0	6566.2	6580.3	6569.3
5°	5867.2	5897.1	5939.6	5999.4	6089.2	6229.3	6374.1	6492.2	6506.3	6572.5	6591.3
7.5°	5476.8	5494.1	5528.7	5624.8	5752.3	5908.1	6119.1	6358.4	6393.0	6550.4	6605.5
10°	5158.8	5176.1	5217.0	5316.2	5442.2	5637.4	5868.8	6183.6	6212.0	6482.7	6608.7
12.5°	4921.1	4936.8	4980.9	5078.5	5223.3	5405.9	5661.0	5994.7	6035.6	6393.0	6578.8
15°	4740.0	4769.9	4806.2	4886.4	5039.1	5215.5	5462.6	5821.5	5854.6	6298.5	6558.3
17.5°	4662.9	4677.1	4702.3	4776.2	4888.0	5061.2	5309.9	5686.2	5725.5	6232.4	6553.6
20°	4666.0	4680.2	4684.9	4725.9	4806.2	4955.7	5201.3	5579.1	5626.3	6174.2	6561.4
22.5°	4773.1	4774.7	4757.4	4743.2	4774.7	4899.0	5124.2	5498.8	5553.9	6149.0	6567.7
25°	4938.4	4966.7	4941.5	4875.4	4817.2	4877.0	5094.2	5454.7	5506.7	6112.8	6559.9
27.5°	5206.0	5210.7	5190.3	5100.5	4949.4	4905.3	5081.6	5421.7	5465.8	6086.0	6520.5
30°	5564.9	5550.8	5531.9	5432.7	5195.0	5014.0	5108.4	5391.8	5437.4	6046.7	6473.3
32.5°	5928.6	5972.7	5955.4	5838.9	5530.3	5224.9	5195.0	5388.6	5426.4	6016.7	6421.3
35°	6314.3	6334.7	6416.6	6356.8	6040.4	5566.5	5357.1	5437.4	5467.3	6018.3	6385.1
37.5°	6616.5	6671.6	6863.7	6915.6	6618.1	6018.3	5620.0	5576.0	5588.6	6095.5	6399.3
40°	6981.8	7076.2	7323.4	7535.9	7340.7	6605.5	6067.1	5832.6	5848.3	6281.2	6492.2
42.5°	7444.6	7510.7	7842.9	8131.0	8099.5	7381.6	6608.7	6252.9	6260.8	6651.2	6751.9
45°	7986.1	8080.6	8453.7	8886.6	8960.6	8260.0	7391.1	6888.9	6884.2	7225.8	7236.8
47.5°	8678.8	8737.0	9107.0	9579.3	9878.4	9363.6	8340.3	7801.9	7751.6	8063.3	7973.5
50°	9316.4	9407.7	9687.9	10204.2	10948.8	10656.0	9588.7	8985.8	8867.7	9158.9	9007.8
52.5°	9584.0	9680.0	9916.1	10556.9	11866.6	12327.9	11174.0	10397.9	10201.1	10424.6	10369.5
55°	9119.6	9243.9	9464.3	10243.6	12269.6	14256.3	13311.8	12030.3	11887.1	11791.1	11806.8
57.5°	7871.2	7989.3	8286.8	9146.3	11787.9	15655.8	16364.2	14128.8	13821.8	13379.5	13455.0
60°	5991.6	6065.5	6219.8	7172.2	10360.1	16019.5	19830.7	16781.4	16586.2	14961.6	15015.1
62.5°	4255.2	4338.6	4445.7	4921.1	7584.7	14994.6	22544.7	20485.6	19788.2	16600.4	16548.4
65°	3455.5	3398.8	3527.9	3749.8	4450.4	11621.0	23155.5	25627.1	24666.8	18758.7	18037.7
67.5°	2841.5	2781.7	2909.2	3304.3	3384.6	6745.6	20954.7	28964.5	28772.4	21105.8	19550.5
69°	2515.6	2484.2	2595.9	3046.2	3249.2	4790.4	18254.9	29428.9	29474.5	22489.6	19783.5
70°	2266.9	2279.5	2388.1	2915.5	3187.8	3949.8	15602.3	28788.1	29175.4	23180.7	19531.6
72.5°	1668.7	1695.5	1846.6	2414.9	3129.6	3351.6	9284.9	25145.3	25830.1	23221.6	17867.6
75°	1166.5	1153.9	1287.7	1818.2	2956.4	3321.6	5453.2	19446.6	20222.7	20071.6	15013.5
77.5°	763.5	784.0	891.0	1284.6	2487.3	3296.5	3554.6	13796.6	14300.4	13423.6	8880.3
80°	538.4	536.8	596.6	876.9	1845.0	3167.4	2910.8	8696.1	8568.6	5275.3	2633.7
82.5°	308.6	330.6	399.9	617.1	1234.2	2788.0	2677.8	4159.1	3797.1	1503.4	889.4
85°	171.6	179.5	237.7	373.1	721.0	2100.0	2337.7	1892.2	1785.2	628.1	382.5
87.5°	55.1	59.8	99.2	188.9	327.4	991.8	1323.9	873.7	806.0	226.7	154.3
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: P454750

CATALOG NUMBER: GALN-SA5D-827-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6	6564.6
2.5°	6574.0	6592.9	6542.5	6493.7	6449.7	6388.3	6333.2	6287.5	6256.0	6251.3	6235.6
5°	6596.1	6597.6	6501.6	6372.5	6246.6	6108.1	5964.8	5862.5	5766.4	5712.9	5686.2
7.5°	6611.8	6597.6	6424.5	6215.1	5972.7	5720.8	5468.9	5267.4	5111.6	5050.2	5073.8
10°	6605.5	6561.4	6308.0	5972.7	5620.0	5243.8	4881.7	4598.4	4338.6	4204.8	4207.9
12.5°	6570.9	6498.5	6134.8	5700.3	5182.4	4678.6	4124.5	3742.0	3441.3	3263.4	3208.3
15°	6541.0	6415.0	5931.7	5330.4	4686.5	3967.1	3291.7	2819.5	2567.6	2427.5	2425.9
17.5°	6509.5	6334.7	5709.8	4938.4	4116.6	3191.0	2482.6	2122.1	2004.0	2018.2	1994.6
20°	6476.4	6240.3	5478.4	4502.3	3422.4	2380.3	1859.2	1712.8	1745.8	1810.4	1819.8
22.5°	6438.6	6139.5	5229.6	4022.2	2692.0	1791.5	1508.1	1486.1	1571.1	1671.8	1686.0
25°	6380.4	6013.6	4916.4	3520.0	2076.4	1443.6	1320.8	1336.5	1420.0	1505.0	1514.4
27.5°	6298.5	5857.8	4599.9	2893.5	1560.1	1238.9	1207.4	1227.9	1268.8	1320.8	1333.4
30°	6188.3	5681.4	4236.3	2351.9	1249.9	1136.6	1124.0	1135.0	1158.6	1180.7	1187.0
32.5°	6078.1	5511.4	3869.5	1800.9	1114.6	1068.9	1056.3	1056.3	1056.3	1059.5	1061.0
35°	5975.8	5350.8	3475.9	1402.6	1043.7	1015.4	998.1	979.2	976.0	965.0	965.0
37.5°	5919.1	5204.4	3057.2	1174.4	991.8	971.3	947.7	916.2	898.9	900.5	897.3
40°	5930.2	5108.4	2676.2	1045.3	949.3	927.2	891.0	854.8	843.8	843.8	840.6
42.5°	6054.5	5076.9	2311.0	977.6	908.3	883.1	837.5	804.4	798.1	796.6	799.7
45°	6341.0	5154.1	1983.5	933.5	873.7	835.9	790.3	760.4	754.1	754.1	752.5
47.5°	6899.9	5404.4	1749.0	905.2	848.5	799.7	752.5	722.6	711.6	708.4	708.4
50°	7768.9	5947.5	1574.2	880.0	817.0	766.7	717.9	683.2	665.9	664.3	662.8
52.5°	8976.3	6794.4	1506.5	861.1	782.4	732.0	678.5	645.4	623.4	618.7	615.5
55°	10388.4	7976.7	1599.4	846.9	746.2	692.7	637.6	602.9	582.5	573.0	571.4
57.5°	12024.1	9396.6	1952.1	828.1	713.1	650.2	596.6	562.0	540.0	528.9	525.8
60°	13492.8	10856.0	2567.6	817.0	684.8	604.5	549.4	517.9	497.5	486.4	484.9
62.5°	15106.4	12247.6	3302.8	846.9	672.2	560.4	505.3	477.0	459.7	448.7	448.7
65°	16830.2	13640.8	3789.2	947.7	691.1	525.8	458.1	434.5	418.7	410.9	409.3
67.5°	17992.0	14122.5	3121.7	1051.6	738.3	488.0	412.5	393.6	384.1	376.2	376.2
69°	17866.1	13513.3	2303.1	1078.4	752.5	469.1	387.3	373.1	360.5	357.4	354.2
70°	17467.8	12819.0	1930.0	1061.0	741.5	451.8	371.5	354.2	343.2	340.0	338.5
72.5°	15558.2	11117.3	1437.3	922.5	631.3	392.0	329.0	313.3	303.8	299.1	299.1
75°	12926.1	9086.5	1122.4	733.6	494.3	330.6	281.8	269.2	261.3	258.2	256.6
77.5°	7244.7	5073.8	806.0	574.6	374.7	267.6	236.1	225.1	217.2	214.1	214.1
80°	2018.2	1449.9	473.8	379.4	255.0	203.1	187.3	179.5	168.4	160.6	165.3
82.5°	760.4	628.1	270.8	228.3	162.1	135.4	130.7	124.4	119.6	108.6	108.6
85°	369.9	305.4	173.2	121.2	89.7	70.8	67.7	64.5	61.4	53.5	55.1
87.5°	127.5	135.4	75.6	44.1	26.8	17.3	14.2	7.9	7.9	7.9	7.9
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)