

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: P454070

Luminaire Tested: **GALN-SA5A-827-U-T3R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454070
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-827-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13181 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

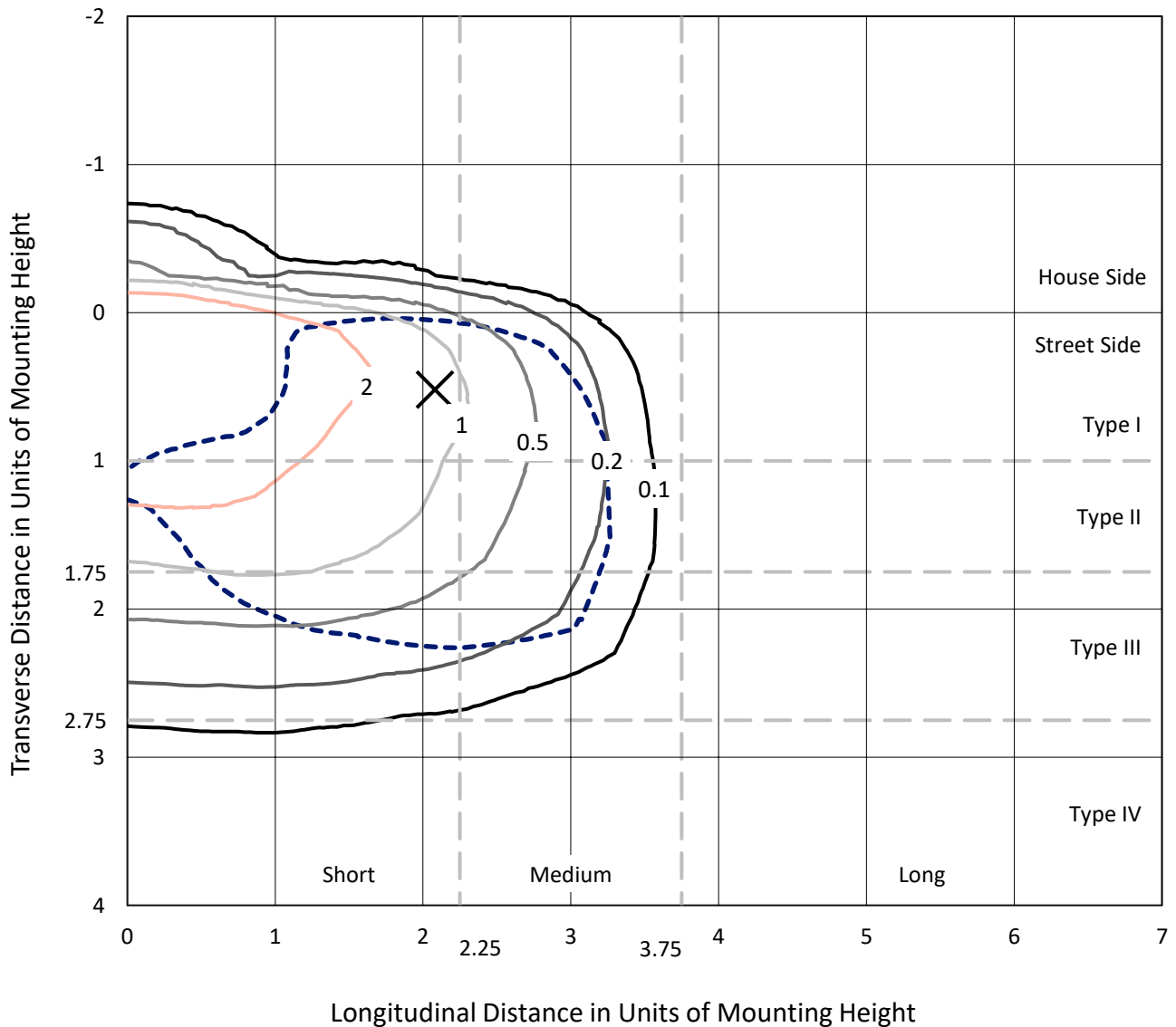
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

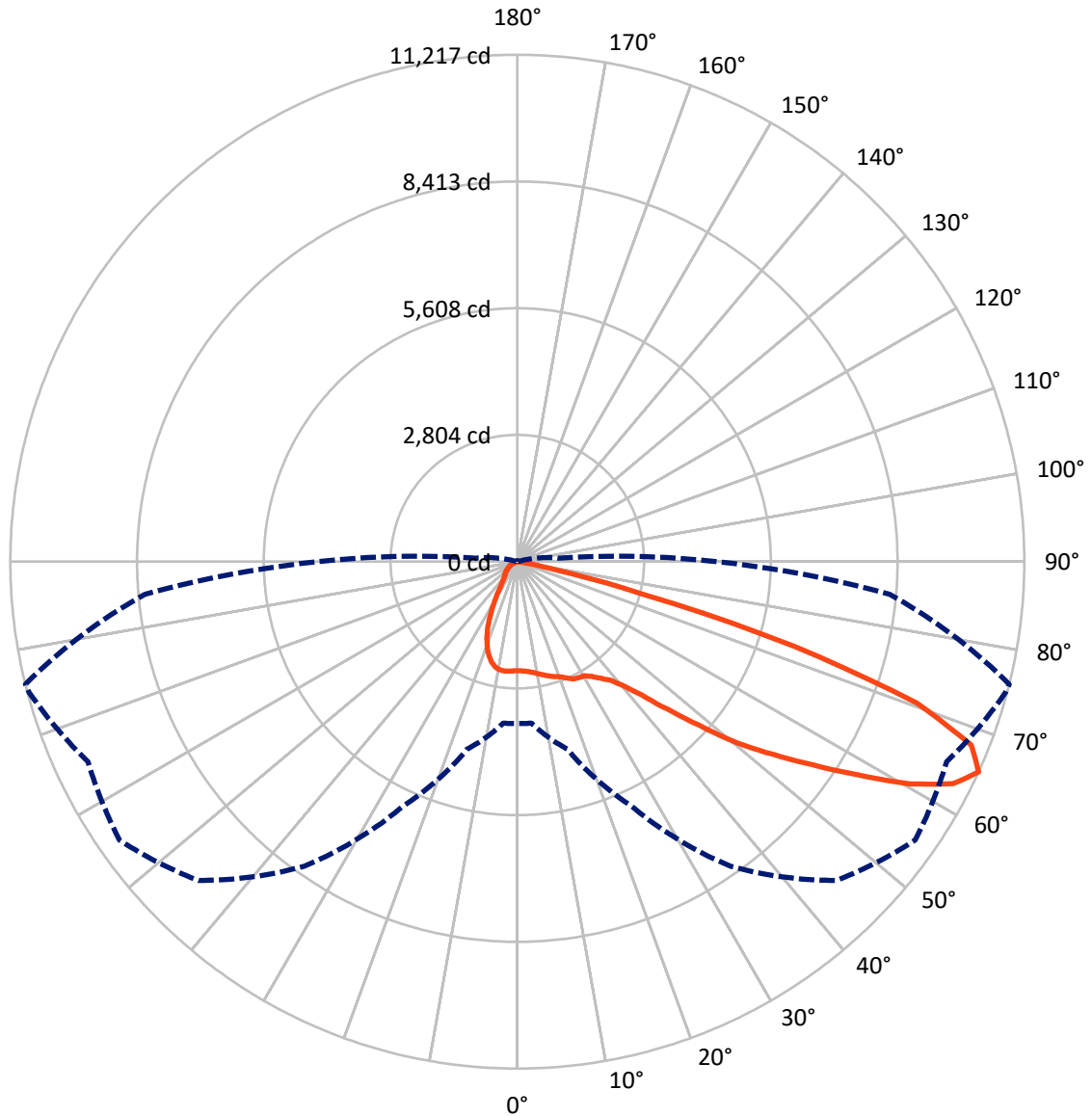
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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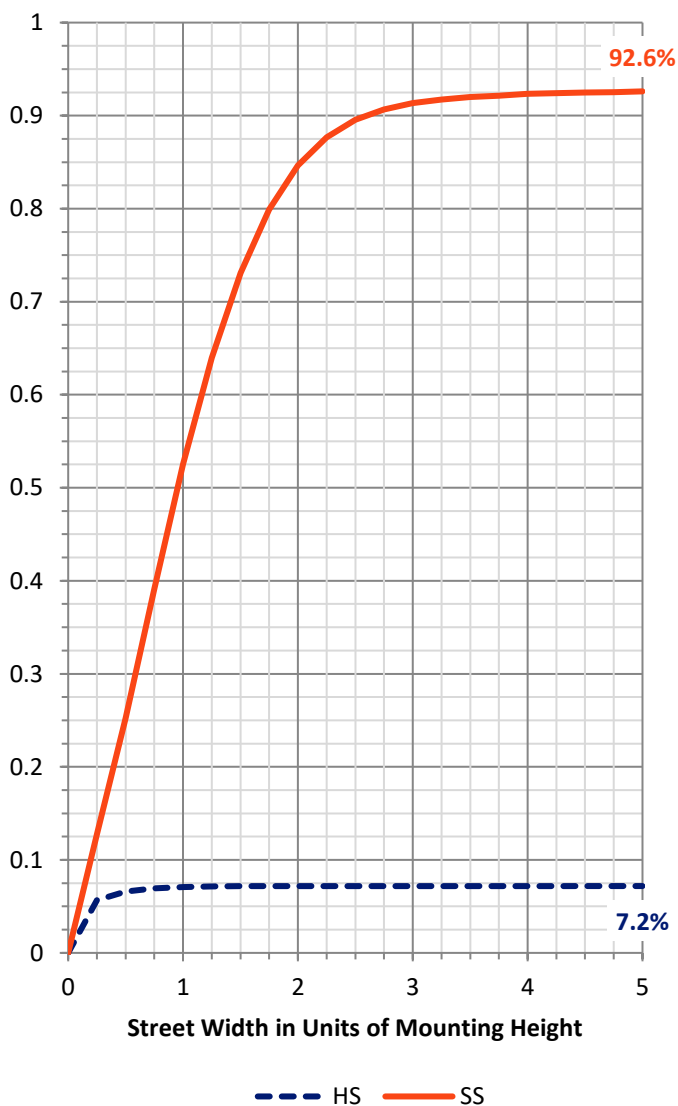
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	951.9	0.0	951.9
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	12229.1	0.0	12229.1
	% Fixture	92.8	0.0	92.8
Total	Lumens	13181.0	0.0	13181.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.6	1.5
10°-20°	442.3	3.4
20°-30°	712.7	5.4
30°-40°	1239.1	9.4
40°-50°	2047.6	15.5
50°-60°	3163.1	24.0
60°-70°	3862.6	29.3
70°-80°	1466.0	11.1
80°-90°	48.9	0.4
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°	13181.0	100.0
0°-180°	13181.0	100.0

Coefficient of Utilization



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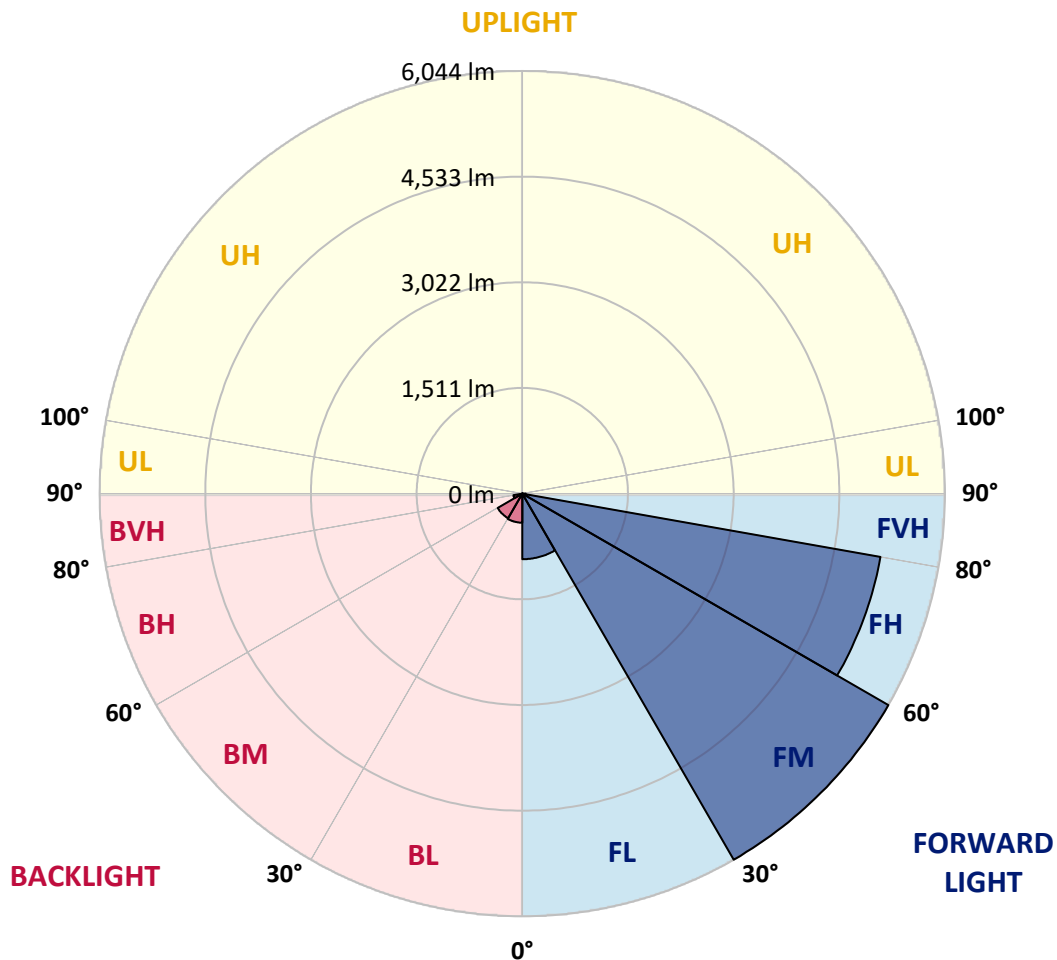
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	937.7	7.1			
FM (30°-60°)	6043.7	45.9			
FH (60°-80°)	5199.5	39.4			G3/7500
FVH (80°-90°)	48.2	0.4			G1/100
BL (0°-30°)	415.9	3.2	B1/500		
BM (30°-60°)	406.2	3.1	B1/1000		
BH (60°-80°)	129.2	1.0	B1/500		G1/500
BVH (80°-90°)	0.7	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2
2.5°	2304.2	2305.1	2310.7	2324.7	2346.1	2363.8	2378.7	2402.9	2419.6	2421.5	2427.0
5°	2145.1	2133.9	2145.1	2181.4	2213.9	2263.3	2323.7	2384.2	2438.2	2441.9	2468.0
7.5°	1966.4	1975.7	1993.4	2030.6	2092.0	2167.4	2254.9	2362.8	2465.2	2474.5	2525.7
10°	1784.9	1805.4	1834.2	1891.0	1976.6	2074.3	2193.5	2347.9	2508.0	2521.0	2609.4
12.5°	1617.4	1626.7	1662.1	1738.4	1844.5	1982.2	2146.9	2339.6	2555.5	2571.3	2698.8
15°	1489.0	1501.1	1531.8	1600.7	1718.8	1895.7	2108.8	2336.8	2602.0	2624.3	2788.1
17.5°	1464.8	1472.2	1485.3	1531.8	1635.1	1826.8	2074.3	2335.8	2646.7	2673.7	2870.9
20°	1564.4	1557.9	1544.8	1540.2	1596.9	1773.8	2049.2	2343.3	2689.5	2720.2	2958.4
22.5°	1813.8	1822.1	1745.8	1655.6	1637.0	1765.4	2045.5	2378.7	2757.4	2793.7	3056.1
25°	2343.3	2279.1	2160.0	1944.1	1781.2	1816.6	2087.4	2462.4	2836.5	2876.5	3144.6
27.5°	2928.6	2909.1	2723.9	2368.4	2065.0	1924.5	2161.8	2526.6	2862.6	2903.5	3194.8
30°	3503.8	3527.0	3314.9	2922.1	2477.3	2124.6	2231.6	2550.8	2885.8	2928.6	3259.0
32.5°	4037.0	4064.9	3878.8	3489.8	2963.1	2470.8	2351.7	2644.8	2983.6	3027.3	3366.0
35°	4456.7	4460.4	4319.9	4010.0	3493.5	2891.4	2611.3	2809.5	3115.7	3166.9	3479.6
37.5°	4842.0	4836.4	4671.7	4404.6	3935.6	3309.3	2938.0	2999.4	3266.5	3319.5	3643.4
40°	5127.7	5131.4	5078.4	4827.1	4347.8	3695.5	3196.7	3177.1	3519.6	3602.4	3881.6
42.5°	5318.5	5352.9	5379.0	5251.5	4866.2	4171.0	3594.0	3557.7	3958.8	4027.7	4218.5
45°	5473.0	5534.4	5664.7	5658.1	5364.1	4754.5	4139.4	4064.9	4581.4	4654.9	4647.5
47.5°	5585.6	5647.9	5863.8	5994.1	5832.2	5320.3	4825.2	4761.0	5325.0	5405.0	5121.2
50°	5643.3	5717.7	5993.2	6245.4	6197.9	5865.7	5607.0	5610.7	6223.0	6300.3	5670.2
52.5°	5508.3	5605.1	6062.0	6516.2	6608.3	6387.7	6339.4	6462.2	7022.4	7088.5	6166.3
55°	5077.4	5199.4	5968.0	6747.0	7083.8	7003.8	7171.3	7358.4	7896.3	7939.1	6675.3
57.5°	4804.8	4934.1	5690.7	6943.3	7655.2	7778.1	8043.3	8180.1	8798.0	8906.9	7259.7
60°	4574.9	4676.3	5462.7	6985.2	8235.9	8725.5	8983.2	9124.7	9911.1	9981.8	7902.8
62.5°	4192.4	4308.8	5077.4	6693.0	8528.2	9483.9	10018.1	9954.8	10771.9	10821.2	8297.4
65°	3577.3	3587.5	4295.7	5958.7	8226.6	9976.2	10744.9	10479.7	11183.2	11216.7	8266.7
67.5°	2669.9	2768.6	3304.6	4683.8	6948.9	9555.6	10980.3	10493.6	10923.6	10830.5	7610.6
70°	1719.8	1795.2	2240.0	3247.8	5010.4	7974.4	10199.5	9774.3	9587.2	9380.6	6229.5
72.5°	793.8	890.6	1330.8	1855.6	2971.5	5680.5	8279.7	7940.9	6900.5	6390.5	3959.8
75°	346.2	370.4	657.0	979.0	1393.1	3004.0	5459.0	4929.5	3116.6	2846.8	1584.8
77.5°	211.2	227.1	344.3	524.9	547.2	1144.7	2940.7	2150.7	963.2	849.7	429.9
80°	143.3	161.0	250.3	274.5	187.1	319.2	1103.7	574.2	194.5	186.1	92.1
82.5°	69.8	88.4	185.2	153.6	81.0	102.4	321.1	122.8	56.8	53.0	32.6
85°	10.2	17.7	104.2	100.5	36.3	24.2	56.8	30.7	19.5	18.6	14.9
87.5°	0.0	0.0	35.4	15.8	3.7	3.7	6.5	6.5	7.4	6.5	7.4
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°	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2	2411.2
2.5°	2429.8	2434.5	2416.8	2391.7	2364.7	2337.7	2299.6	2265.1	2244.6	2256.7	2227.0
5°	2473.6	2469.9	2423.3	2347.0	2245.6	2123.7	2002.7	1899.4	1865.9	1815.6	1810.0
7.5°	2534.1	2523.8	2425.2	2250.2	2021.3	1792.4	1569.0	1421.1	1336.4	1264.7	1266.6
10°	2618.8	2589.0	2403.8	2079.9	1703.0	1357.8	1073.0	877.6	792.9	765.9	744.5
12.5°	2706.2	2648.5	2344.2	1850.1	1326.1	927.8	652.4	533.2	481.1	464.4	462.5
15°	2784.4	2693.2	2240.0	1573.7	964.1	592.8	444.8	405.7	399.2	400.2	399.2
17.5°	2861.6	2728.6	2095.7	1280.5	655.2	425.3	382.5	373.2	376.0	379.7	378.8
20°	2925.9	2736.0	1911.5	977.1	463.4	373.2	359.2	357.4	360.1	362.9	362.9
22.5°	2995.7	2741.6	1692.8	676.6	378.8	347.1	339.7	339.7	343.4	347.1	348.1
25°	3047.8	2710.9	1431.3	485.8	334.1	322.0	318.3	319.2	322.9	324.8	323.9
27.5°	3056.1	2624.3	1154.0	372.2	303.4	291.3	287.6	291.3	286.6	289.4	287.6
30°	3063.6	2514.5	872.9	313.6	275.5	256.8	251.3	245.7	242.0	237.3	236.4
32.5°	3086.9	2385.2	637.5	282.0	249.4	228.9	215.9	200.1	188.0	184.3	183.3
35°	3097.1	2229.8	468.1	256.8	226.1	203.8	180.5	158.2	140.5	134.0	138.7
37.5°	3136.2	2079.0	362.9	238.2	205.7	177.7	148.0	120.0	103.3	99.6	101.4
40°	3216.2	1915.2	304.3	222.4	188.0	153.6	117.3	90.3	79.1	75.4	74.4
42.5°	3344.6	1752.3	270.8	207.5	170.3	129.4	92.1	70.7	61.4	58.6	58.6
45°	3501.0	1596.0	247.5	191.7	151.7	104.2	72.6	56.8	51.2	49.3	49.3
47.5°	3706.6	1459.2	228.0	175.9	131.2	82.8	58.6	49.3	45.6	46.5	47.5
50°	3915.1	1357.8	206.6	158.2	108.0	67.9	50.3	43.7	42.8	43.7	43.7
52.5°	4072.4	1298.2	177.7	134.0	84.7	56.8	44.7	40.9	40.0	38.2	38.2
55°	4284.6	1285.2	141.5	108.9	67.0	47.5	40.0	37.2	34.4	32.6	31.6
57.5°	4557.2	1300.1	108.9	84.7	52.1	39.1	35.4	30.7	27.0	23.3	23.3
60°	4726.6	1266.6	84.7	65.1	38.2	31.6	27.0	22.3	17.7	14.9	14.0
62.5°	4672.6	1125.1	67.0	48.4	27.0	23.3	17.7	14.9	10.2	7.4	6.5
65°	4394.4	908.3	54.0	33.5	19.5	14.0	9.3	9.3	4.7	0.9	0.0
67.5°	3846.2	672.8	42.8	22.3	11.2	6.5	4.7	2.8	0.0	0.0	0.0
70°	3130.6	485.8	33.5	14.0	6.5	4.7	1.9	0.9	0.0	0.0	0.0
72.5°	1987.8	278.3	26.1	8.4	4.7	1.9	0.0	0.0	0.0	0.0	0.0
75°	768.7	108.9	17.7	5.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	217.8	51.2	10.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	56.8	22.3	5.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.0	9.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.8	3.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.4	0.9	0.0	0.0	0.0	0.0	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)