

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: P454297

Luminaire Tested: **GALN-SA5B-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
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-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21067 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

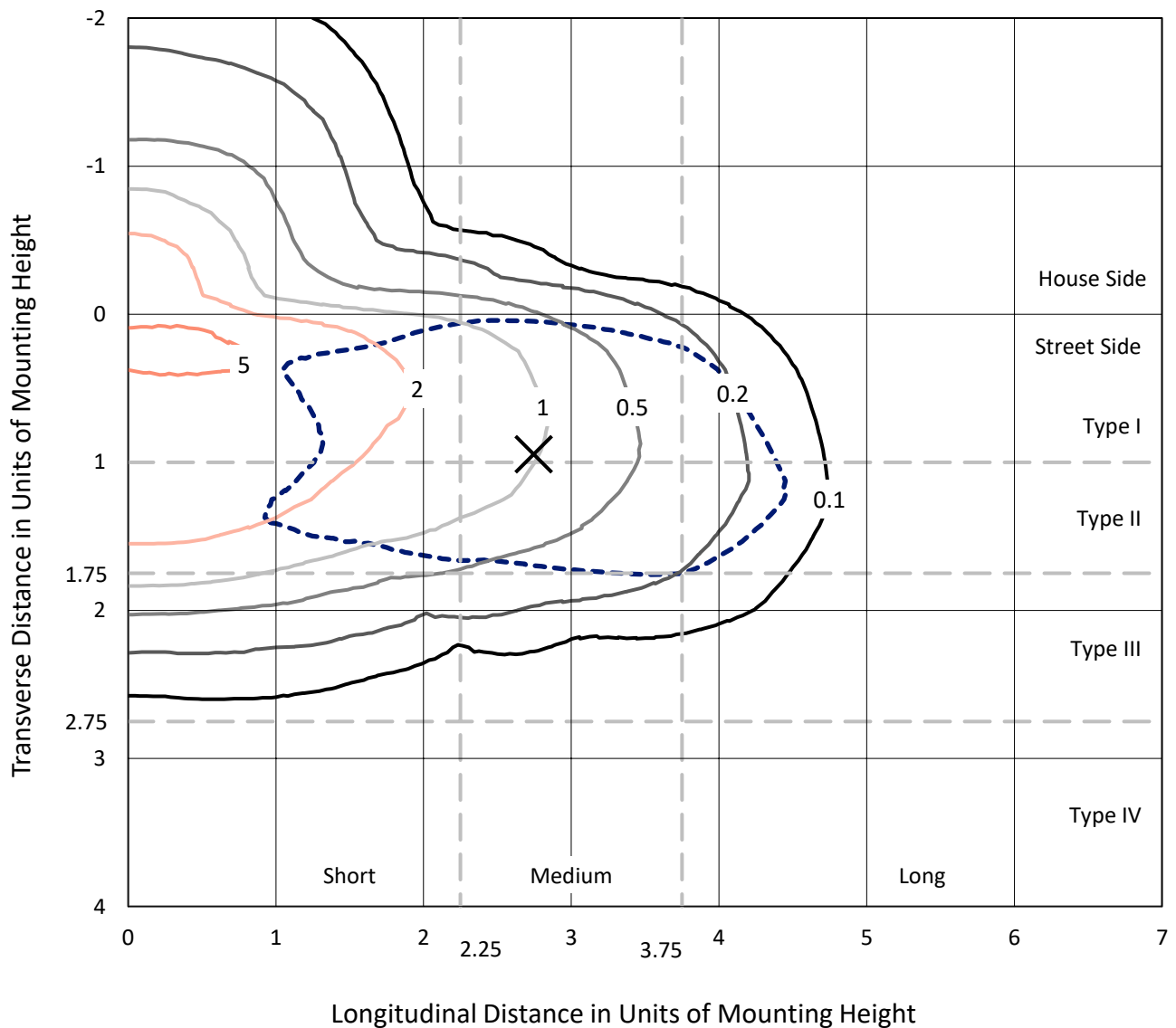
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

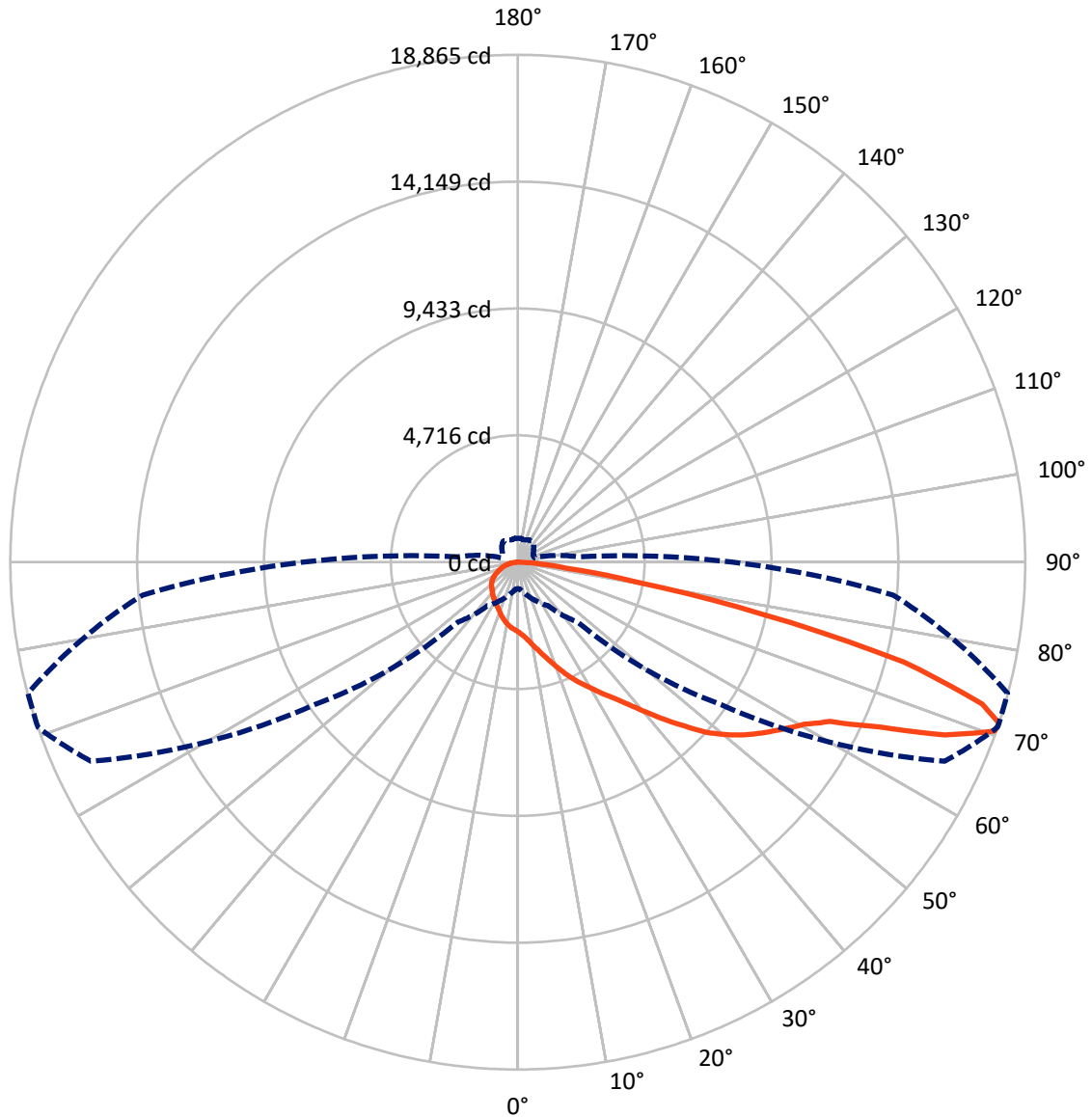
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3788.8	0.0	3788.8
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	17278.2	0.0	17278.2
	% Fixture	82.0	0.0	82.0
Total	Lumens	21067.0	0.0	21067.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.6	1.2
10°-20°	843.4	4.0
20°-30°	1474.0	7.0
30°-40°	2192.4	10.4
40°-50°	3230.2	15.3
50°-60°	4522.3	21.5
60°-70°	5058.0	24.0
70°-80°	3089.6	14.7
80°-90°	397.4	1.9
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°	21067.0	100.0
0°-180°	21067.0	100.0

Coefficient of Utilization



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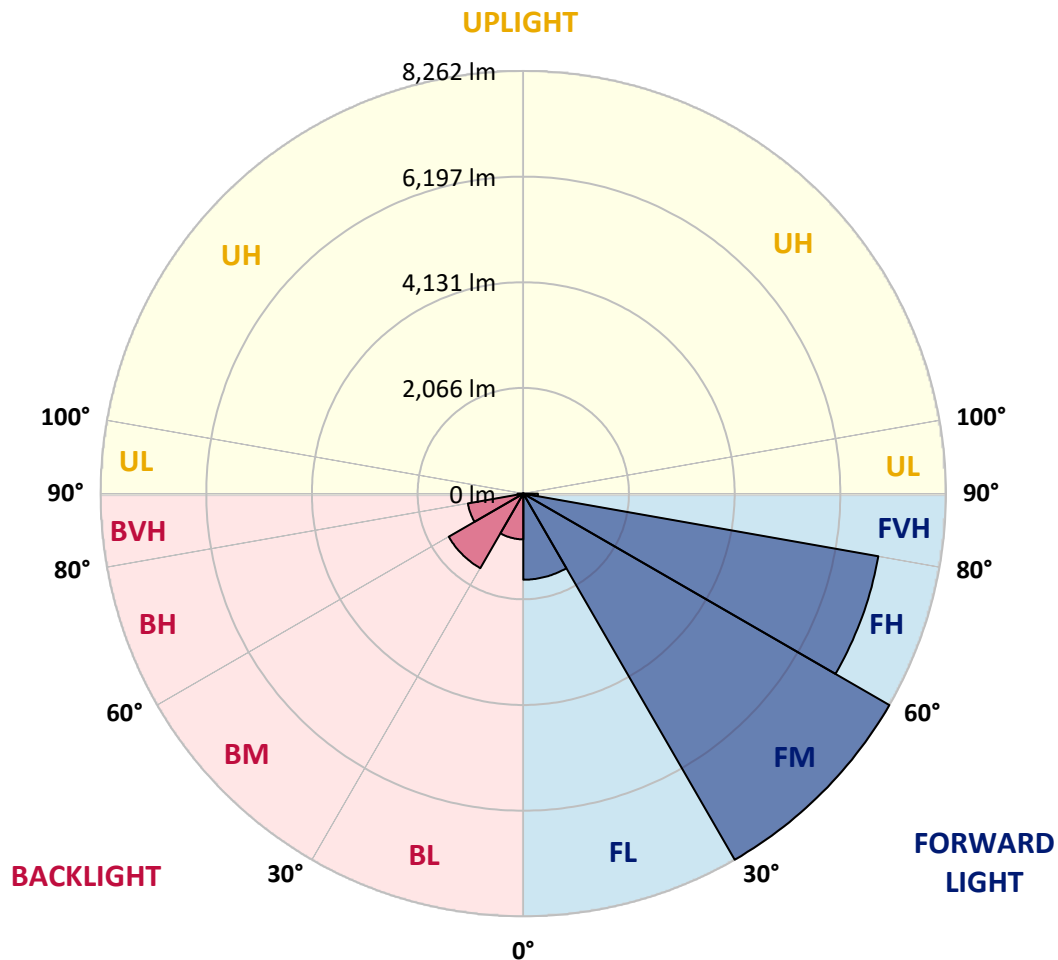
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1683.3	8.0			
FM	(30°-60°)	8262.1	39.2			
FH	(60°-80°)	7046.9	33.4			G3/7500
FVH	(80°-90°)	286.0	1.4			G3/500
BL	(0°-30°)	893.8	4.2	B2/1000		
BM	(30°-60°)	1682.8	8.0	B2/2500		
BH	(60°-80°)	1100.8	5.2	B3/2500		G3/2500
BVH	(80°-90°)	111.5	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-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6
2.5°	2870.4	2856.5	2857.7	2838.0	2812.5	2784.7	2745.3	2710.6	2682.8	2666.6	2619.1
5°	3180.7	3166.8	3149.4	3106.6	3088.1	3019.8	2932.9	2854.2	2794.0	2760.4	2665.5
7.5°	3432.0	3428.5	3423.9	3399.6	3352.1	3257.1	3183.0	3046.4	2957.2	2893.6	2731.5
10°	3587.1	3592.9	3596.4	3601.0	3581.3	3531.6	3429.7	3257.1	3143.7	3062.6	2817.1
12.5°	3665.9	3671.7	3691.3	3734.2	3760.8	3755.0	3671.7	3502.6	3346.3	3239.8	2908.6
15°	3714.5	3723.8	3758.5	3815.2	3904.4	3961.1	3920.6	3764.3	3592.9	3466.7	3017.5
17.5°	3767.8	3778.2	3816.4	3897.4	4014.4	4137.1	4181.1	4046.8	3860.4	3709.9	3139.0
20°	3797.9	3811.8	3866.2	3972.7	4109.3	4287.7	4433.5	4362.9	4159.1	3992.4	3279.1
22.5°	3846.5	3858.1	3904.4	4017.9	4181.1	4404.6	4686.0	4670.9	4491.4	4276.1	3433.1
25°	3978.5	3997.0	4020.2	4088.5	4246.0	4523.9	4895.5	4999.8	4813.3	4572.5	3574.4
27.5°	4227.4	4242.5	4241.3	4250.6	4339.8	4626.9	5077.3	5325.1	5132.9	4872.4	3711.0
30°	4511.1	4516.9	4521.5	4500.7	4520.4	4732.3	5244.1	5647.0	5454.8	5180.4	3830.3
32.5°	4856.2	4867.8	4828.4	4775.1	4758.9	4888.6	5381.9	5968.9	5835.7	5493.0	3948.4
35°	5263.7	5293.9	5214.0	5120.2	5054.2	5113.2	5567.1	6297.7	6226.0	5892.5	4104.7
37.5°	5729.2	5766.3	5692.2	5508.1	5414.3	5430.5	5809.1	6704.2	6719.2	6347.5	4337.4
40°	6110.2	6158.8	6161.1	5900.6	5758.2	5776.7	6116.0	7141.8	7314.4	6910.3	4611.9
42.5°	6361.4	6408.9	6458.7	6305.8	6156.5	6261.8	6473.7	7616.6	7983.6	7593.4	4995.1
45°	6637.0	6679.8	6707.6	6638.2	6554.8	6828.1	6905.6	8121.4	8696.9	8356.5	5414.3
47.5°	6956.6	7004.1	7030.7	6964.7	6933.4	7324.8	7371.1	8592.7	9458.8	9097.5	5877.4
50°	7382.7	7418.6	7404.7	7363.0	7356.0	7705.7	7818.0	9033.8	10087.5	9895.3	6358.0
52.5°	7913.0	7955.8	7970.9	7911.8	7885.2	7977.8	8178.1	9435.6	10659.5	10580.8	6870.9
55°	8233.7	8302.0	8531.3	8623.9	8687.6	8329.8	8566.0	9879.1	11172.4	11303.3	7422.0
57.5°	7822.7	7910.7	8423.6	8886.8	9485.4	9209.8	9116.0	10342.2	11685.4	12003.8	8082.0
60°	6819.9	6839.6	7500.8	8354.1	9558.3	10341.1	10263.5	11078.7	12241.2	12710.1	8951.6
62.5°	4731.1	4772.8	5554.4	6916.1	8657.5	10748.7	12215.7	12350.0	13037.8	13767.3	10226.4
65°	2439.7	2385.2	3097.3	4346.7	6527.0	9780.7	13797.4	14687.8	14765.4	15420.7	12021.2
67.5°	1501.8	1526.1	1859.6	2538.1	3859.2	7108.3	13631.8	17544.3	17135.6	17450.5	13687.4
70°	1127.8	1157.9	1387.1	1736.8	2352.8	4064.2	10962.9	18236.7	18807.5	18726.5	14194.5
71°	980.7	1012.0	1250.5	1580.5	1976.5	3136.7	9236.5	17511.9	18865.4	18851.5	14003.5
72.5°	836.0	855.7	1042.1	1338.5	1666.2	2198.8	6939.2	15705.6	18060.7	18522.7	13321.5
75°	656.5	671.6	754.9	1021.3	1311.9	1350.1	3723.8	11774.5	14833.7	15713.7	11090.2
77.5°	534.9	545.4	588.2	758.4	1012.0	956.4	1953.4	7664.0	9293.2	10179.0	6532.8
80°	424.9	436.5	462.0	514.1	758.4	682.0	932.1	3883.5	4489.1	4479.9	2607.6
82.5°	330.0	333.5	363.6	377.5	518.7	484.0	504.8	1644.2	1821.4	1881.6	941.4
85°	208.4	218.8	321.9	289.5	310.3	283.7	248.9	653.0	804.7	793.2	376.3
87.5°	63.7	67.2	108.8	122.7	137.8	123.9	91.5	192.2	235.1	254.7	93.8
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°	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6	2585.6
2.5°	2600.6	2587.9	2542.7	2505.7	2470.9	2432.7	2400.3	2391.0	2382.9	2379.5	2378.3
5°	2624.9	2586.7	2497.6	2424.6	2366.7	2313.5	2279.9	2264.8	2249.8	2249.8	2254.4
7.5°	2659.7	2590.2	2452.4	2343.6	2270.6	2220.8	2196.5	2194.2	2197.7	2201.1	2202.3
10°	2697.9	2587.9	2386.4	2250.9	2186.1	2162.9	2164.1	2183.8	2202.3	2216.2	2218.5
12.5°	2734.9	2574.0	2308.8	2164.1	2122.4	2127.0	2159.5	2203.5	2239.4	2259.0	2260.2
15°	2776.6	2552.0	2215.0	2081.9	2068.0	2103.9	2164.1	2231.2	2285.7	2318.1	2321.6
17.5°	2811.3	2514.9	2116.6	2002.0	2019.4	2085.4	2168.7	2255.6	2321.6	2362.1	2369.0
20°	2850.7	2467.5	2014.7	1925.6	1975.4	2064.5	2159.5	2253.2	2321.6	2360.9	2370.2
22.5°	2882.0	2400.3	1917.5	1863.0	1936.0	2039.0	2128.2	2203.5	2259.0	2279.9	2293.8
25°	2894.7	2315.8	1826.0	1812.1	1904.7	1997.4	2057.6	2100.4	2117.8	2115.5	2121.2
27.5°	2887.8	2218.5	1747.2	1771.6	1865.4	1932.5	1962.6	1959.1	1927.9	1898.9	1912.8
30°	2858.8	2102.7	1681.2	1729.9	1814.4	1851.5	1846.8	1801.7	1742.6	1688.2	1691.7
32.5°	2806.7	1977.7	1619.9	1682.4	1742.6	1758.8	1727.6	1668.5	1584.0	1513.4	1502.9
35°	2762.7	1858.4	1565.5	1628.0	1670.8	1662.7	1632.6	1556.2	1479.8	1417.3	1406.8
37.5°	2755.8	1756.5	1513.4	1566.6	1590.9	1579.4	1542.3	1477.5	1449.7	1402.2	1396.4
40°	2792.8	1684.7	1460.1	1501.8	1513.4	1504.1	1463.6	1426.5	1452.0	1440.4	1440.4
42.5°	2893.6	1646.5	1412.6	1436.9	1446.2	1453.1	1424.2	1392.9	1424.2	1370.9	1353.6
45°	3053.3	1647.7	1369.8	1373.3	1401.0	1425.4	1405.7	1359.4	1343.1	1236.6	1215.8
47.5°	3288.4	1687.0	1335.0	1313.0	1362.8	1403.4	1375.6	1308.4	1236.6	1166.0	1153.3
50°	3562.8	1757.7	1303.8	1250.5	1311.9	1375.6	1354.7	1276.0	1201.9	1159.0	1150.9
52.5°	3867.3	1846.8	1265.6	1181.0	1249.4	1362.8	1359.4	1271.4	1169.5	1140.5	1133.6
55°	4243.7	1934.8	1218.1	1100.0	1193.8	1352.4	1346.6	1233.1	1162.5	1141.7	1139.4
57.5°	4681.3	2062.2	1149.8	1017.8	1130.1	1309.6	1296.8	1210.0	1139.4	1124.3	1123.1
60°	5386.5	2260.2	1052.5	942.5	1065.3	1234.3	1250.5	1170.6	1102.3	1098.8	1097.7
62.5°	6314.0	2538.1	951.8	864.9	990.0	1137.0	1183.4	1117.4	1062.9	1080.3	1082.6
65°	7594.6	2772.0	847.6	798.9	906.6	1043.3	1119.7	1067.6	1018.9	1052.5	1052.5
67.5°	8429.4	2776.6	752.6	730.6	822.1	964.5	1052.5	1008.5	962.2	1018.9	1021.3
70°	8255.7	2432.7	673.9	658.8	739.9	880.0	978.4	943.7	890.4	941.4	922.8
71°	7975.5	2241.7	642.6	631.0	707.5	839.5	943.7	914.7	861.5	895.0	884.6
72.5°	7528.6	1946.4	591.7	594.0	658.8	788.5	895.0	864.9	811.7	830.2	826.7
75°	6363.7	1699.8	506.0	516.4	566.2	701.7	797.8	774.6	720.2	720.2	716.7
77.5°	3978.5	1188.0	420.3	426.1	480.5	600.9	685.5	665.8	613.7	596.3	591.7
80°	1484.4	613.7	328.8	335.8	369.4	473.6	567.4	548.8	495.6	475.9	457.4
82.5°	561.6	308.0	242.0	236.2	272.1	361.3	444.6	422.6	380.9	333.5	319.6
85°	211.9	152.8	148.2	143.6	159.8	214.2	275.6	270.9	226.9	193.4	189.9
87.5°	55.6	49.8	57.9	42.8	45.2	40.5	41.7	17.4	8.1	3.5	2.3
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)