

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: P452909

Luminaire Tested: **GALN-SA3D-827-U-T3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452909
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-SA3D-827-U-T3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16835 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

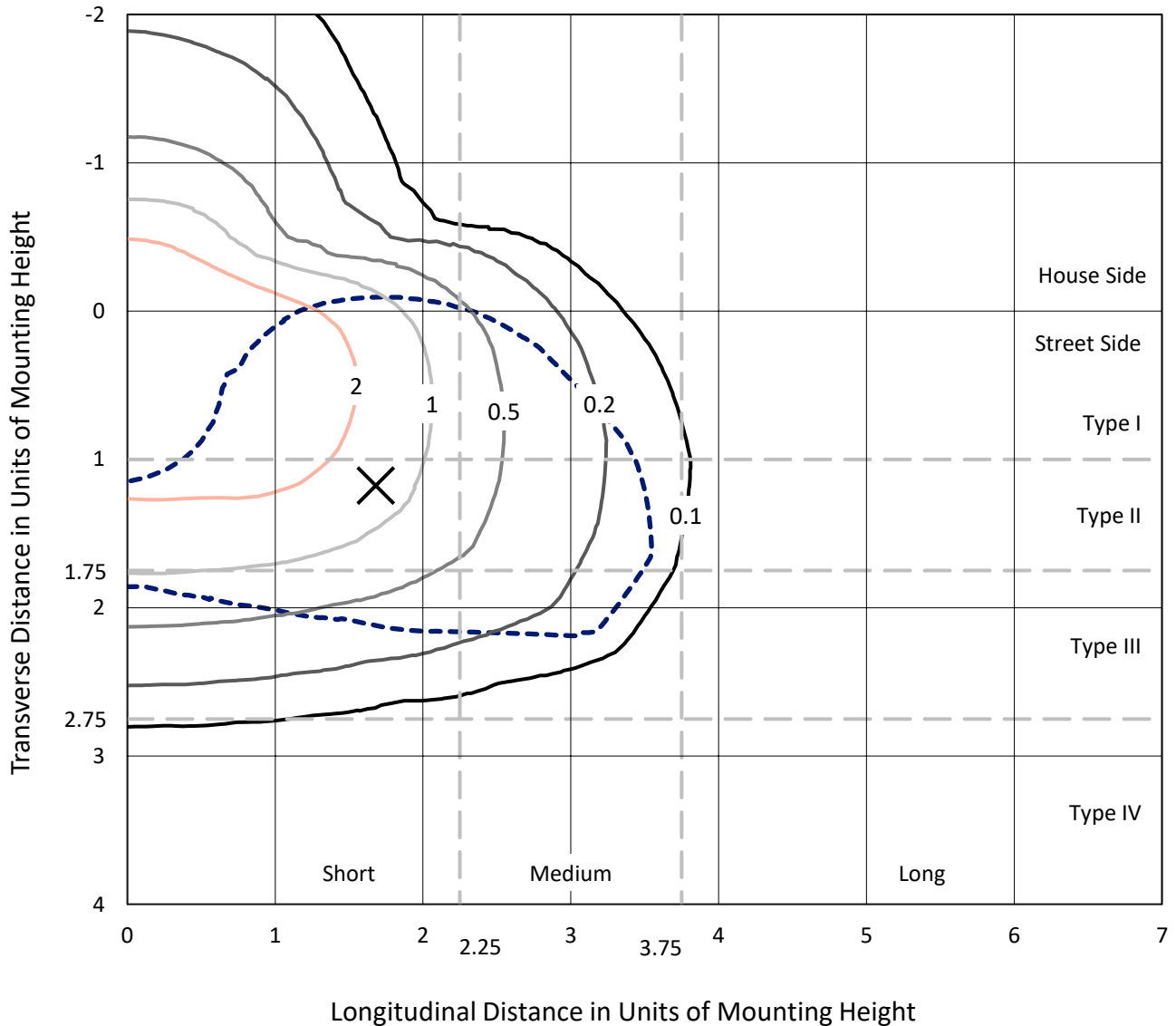
Input Watts (W): 184
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

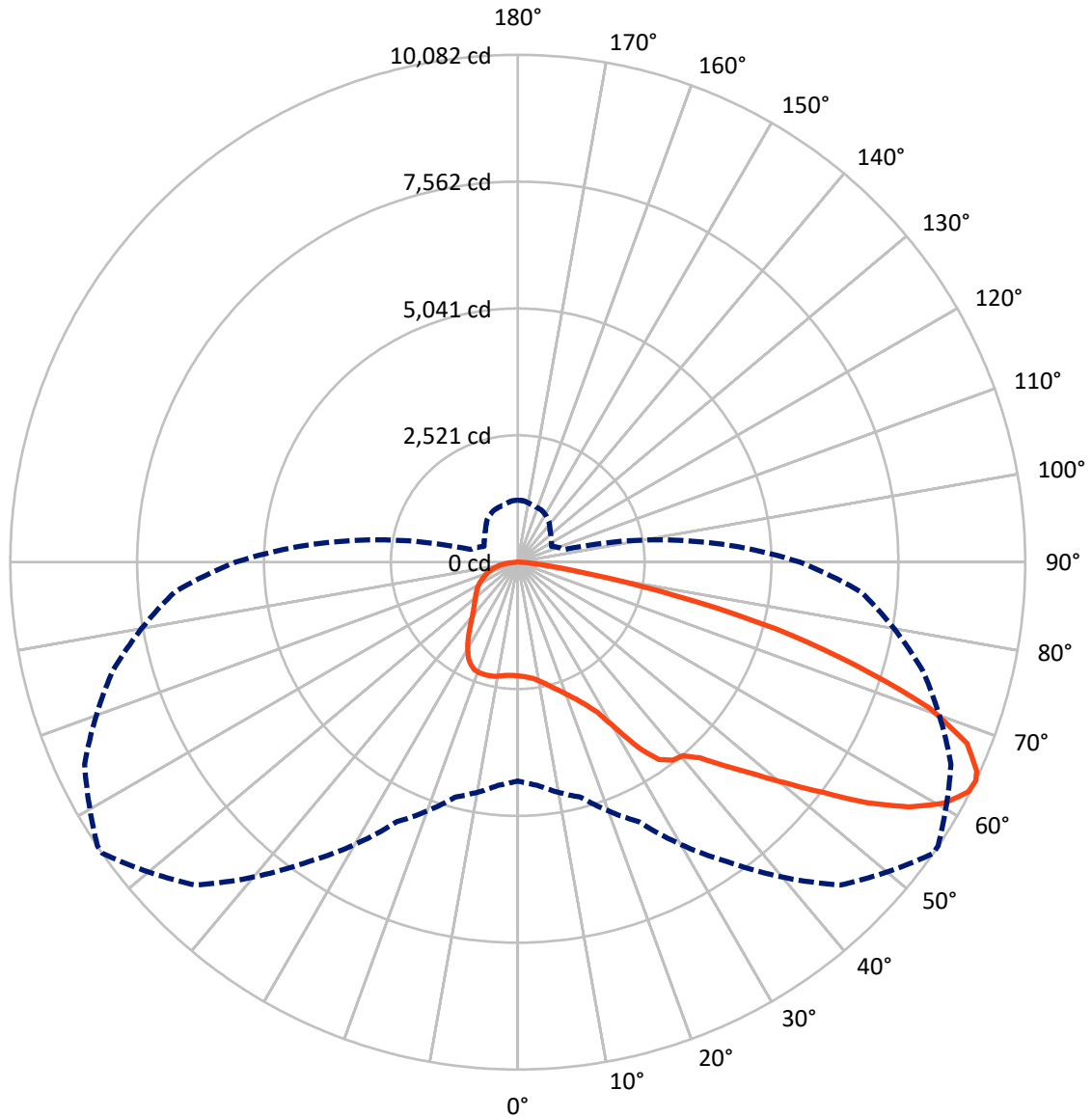
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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	4089.5	0.0	4089.5
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	12745.5	0.0	12745.5
	% Fixture	75.7	0.0	75.7
Total	Lumens	16835.0	0.0	16835.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.7	1.3
10°-20°	693.3	4.1
20°-30°	1234.2	7.3
30°-40°	1899.0	11.3
40°-50°	2691.9	16.0
50°-60°	3896.5	23.1
60°-70°	4032.5	24.0
70°-80°	1888.4	11.2
80°-90°	279.6	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°	16835.0	100.0
0°-180°	16835.0	100.0

Coefficient of Utilization



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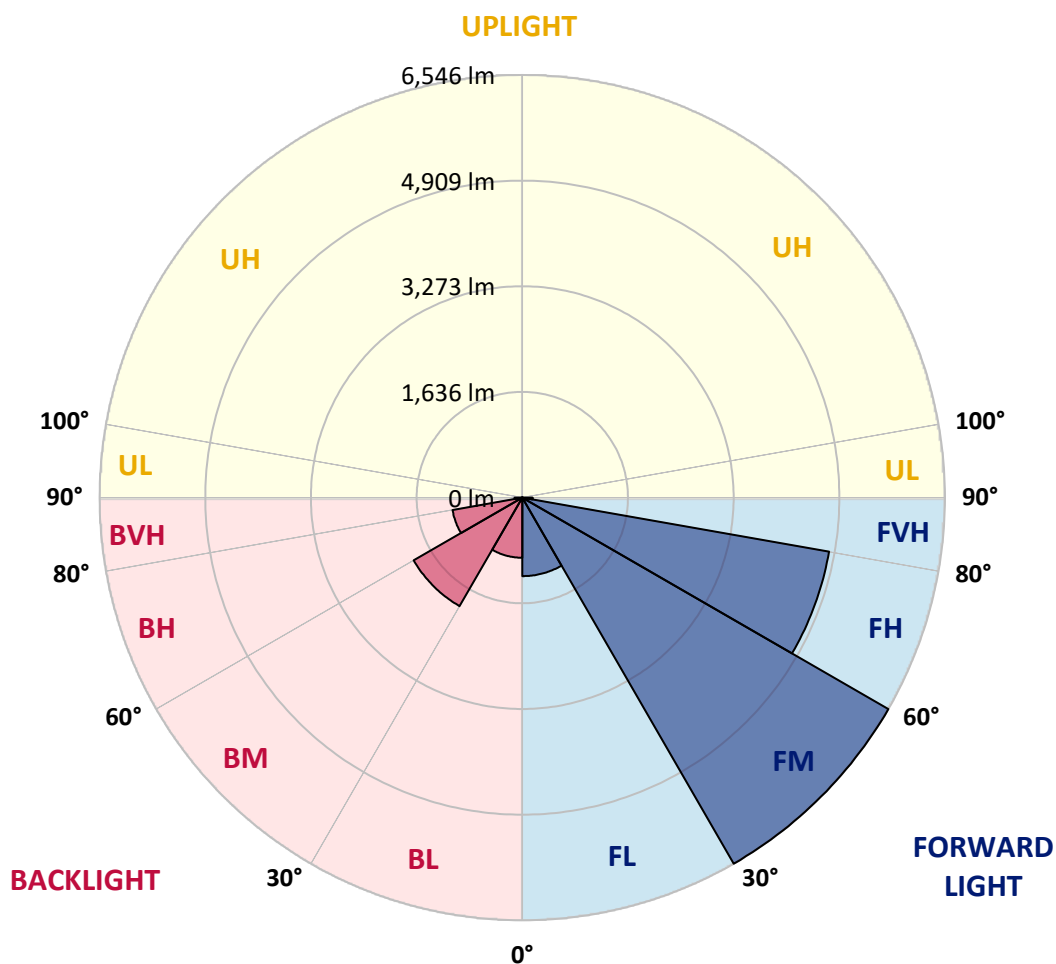
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1215.8	7.2			
FM	(30°-60°)	6545.9	38.9			
FH	(60°-80°)	4823.7	28.7			G2/5000
FVH	(80°-90°)	160.1	1.0			G2/225
BL	(0°-30°)	931.4	5.5	B2/1000		
BM	(30°-60°)	1941.5	11.5	B2/2500		
BH	(60°-80°)	1097.1	6.5	B3/2500		G3/2500
BVH	(80°-90°)	119.5	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°	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7
2.5°	2284.1	2283.1	2286.0	2283.1	2285.0	2278.5	2275.6	2277.5	2274.7	2270.0	2261.6
5°	2312.2	2311.3	2312.2	2308.5	2310.4	2306.6	2300.0	2301.9	2297.2	2286.9	2274.7
7.5°	2360.1	2356.3	2356.3	2355.4	2351.7	2346.0	2341.3	2339.5	2334.8	2321.6	2302.9
10°	2422.0	2422.0	2423.0	2415.5	2420.2	2409.8	2405.1	2404.2	2388.2	2371.4	2345.1
12.5°	2503.7	2508.4	2505.6	2501.8	2499.9	2496.2	2480.2	2484.0	2466.1	2437.0	2405.1
15°	2605.0	2612.5	2607.8	2606.0	2601.3	2587.2	2580.6	2577.8	2554.3	2512.1	2469.9
17.5°	2739.2	2729.8	2726.1	2721.4	2701.7	2691.4	2680.1	2678.2	2657.6	2607.8	2542.1
20°	2856.5	2869.7	2862.1	2857.5	2837.7	2818.0	2809.6	2806.8	2788.9	2734.5	2629.4
22.5°	2996.3	2999.2	3002.0	2990.7	2981.3	2966.3	2951.3	2946.6	2940.0	2883.7	2755.2
25°	3145.5	3156.8	3147.4	3136.2	3124.9	3124.0	3138.0	3136.2	3133.3	3078.9	2922.2
27.5°	3388.6	3398.9	3401.7	3389.5	3346.4	3350.1	3382.0	3392.3	3435.5	3345.4	3137.1
30°	3525.6	3535.9	3559.4	3605.4	3673.9	3733.9	3810.9	3834.3	3875.6	3705.8	3392.3
32.5°	3610.1	3613.8	3656.0	3741.4	3946.9	4171.2	4380.5	4388.9	4415.2	4176.9	3626.0
35°	3743.3	3746.1	3779.9	3873.7	4114.9	4488.4	4812.2	4822.5	4800.9	4323.2	3734.9
37.5°	3907.5	3915.0	3936.6	4014.5	4302.6	4754.0	4991.4	4983.9	4792.5	4439.6	3927.2
40°	4146.8	4146.8	4121.5	4226.6	4500.6	4906.0	5054.3	5041.1	4990.5	4776.5	4220.0
42.5°	4358.0	4354.2	4414.3	4485.6	4748.3	5140.6	5318.0	5339.5	5423.1	5199.7	4553.2
45°	4632.9	4649.8	4683.6	4813.1	5169.7	5541.3	5770.3	5790.9	5909.2	5698.0	4942.6
47.5°	4910.7	4916.3	5022.4	5195.0	5691.4	6084.6	6272.3	6306.1	6414.0	6280.8	5362.1
50°	5107.8	5161.2	5331.1	5603.2	6229.2	6747.2	6893.5	6933.9	7124.4	6915.1	5851.0
52.5°	5316.1	5368.6	5576.0	5990.8	6846.6	7424.7	7604.9	7632.1	7830.1	7557.0	6351.1
55°	5494.4	5543.2	5778.7	6334.3	7338.4	8116.3	8442.9	8411.0	8505.7	8051.5	6736.8
57.5°	5523.5	5562.9	5859.4	6553.8	7708.1	8709.4	9177.6	9196.4	9086.6	8421.3	7055.0
60°	5298.3	5379.0	5719.6	6530.4	7874.2	9122.3	9725.7	9738.8	9427.3	8610.8	7181.6
62.5°	4899.4	4891.0	5302.9	6153.1	7641.5	9216.1	10048.5	10034.4	9560.5	8519.8	7058.7
64°	4348.6	4449.9	4834.7	5689.6	7266.1	9071.6	10082.3	10074.8	9496.7	8330.3	6849.4
65°	4012.6	4007.0	4387.1	5310.5	6892.6	8853.9	10022.2	10011.9	9363.4	8160.4	6687.1
67.5°	2896.9	2910.0	3285.4	4098.0	5603.2	8002.7	9630.9	9592.4	8837.9	7597.4	6069.6
70°	1754.8	1762.3	2057.0	2718.6	4022.0	6469.4	8681.2	8683.1	8033.7	6756.5	5165.9
72.5°	924.3	944.0	1062.3	1543.7	2442.7	4539.1	7042.8	7209.8	6897.3	5766.5	4081.1
75°	514.2	517.1	600.6	761.0	1246.2	2540.3	5293.6	5341.4	5460.6	4641.4	3017.9
77.5°	392.3	397.9	424.2	491.7	678.5	1177.7	3203.7	3444.0	3848.4	3272.2	1722.0
80°	318.1	323.8	346.3	386.6	451.4	558.4	1488.3	1617.8	2059.8	1452.7	671.9
82.5°	247.7	244.0	273.1	299.4	328.4	330.3	610.9	675.7	838.9	625.0	290.9
85°	183.9	183.9	207.4	201.8	212.1	193.3	269.3	297.5	336.0	265.6	135.1
87.5°	73.2	80.7	136.1	122.0	94.8	76.0	99.5	105.1	116.4	104.2	56.3
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°	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7	2258.7
2.5°	2262.5	2265.3	2258.7	2254.1	2252.2	2249.4	2246.5	2247.5	2251.2	2255.0	2254.1
5°	2273.8	2274.7	2263.4	2257.8	2254.1	2250.3	2250.3	2253.1	2260.6	2266.3	2266.3
7.5°	2301.9	2301.9	2286.0	2275.6	2270.0	2263.4	2261.6	2262.5	2268.1	2275.6	2276.6
10°	2346.0	2342.3	2321.6	2305.7	2295.3	2279.4	2265.3	2257.8	2260.6	2265.3	2265.3
12.5°	2399.5	2389.2	2362.9	2341.3	2316.0	2286.0	2256.9	2241.9	2240.9	2245.6	2243.7
15°	2456.8	2445.5	2408.9	2369.5	2325.4	2281.3	2246.5	2225.0	2208.1	2203.4	2213.7
17.5°	2523.4	2499.9	2449.2	2394.8	2329.1	2271.9	2217.5	2173.4	2143.3	2134.9	2137.7
20°	2604.1	2573.1	2504.6	2419.2	2326.3	2238.1	2153.6	2094.5	2045.7	2030.7	2032.6
22.5°	2715.8	2662.3	2561.9	2431.4	2302.9	2174.3	2057.0	1980.0	1920.9	1897.5	1911.5
25°	2842.4	2784.3	2616.3	2428.6	2241.9	2072.0	1942.5	1842.1	1788.6	1753.9	1761.4
27.5°	3017.0	2913.8	2674.5	2403.3	2154.6	1947.2	1797.1	1702.3	1653.5	1635.6	1644.1
30°	3240.3	3081.7	2737.3	2334.8	2016.6	1789.5	1650.7	1588.7	1559.6	1537.1	1544.6
32.5°	3401.7	3200.0	2751.4	2219.3	1867.4	1646.0	1551.2	1505.2	1473.3	1451.7	1456.4
35°	3517.2	3300.4	2744.8	2077.6	1711.7	1527.7	1472.4	1434.8	1383.2	1336.3	1327.8
37.5°	3672.0	3426.1	2697.0	1922.8	1557.8	1448.0	1408.6	1339.1	1265.0	1202.1	1199.3
40°	3909.4	3573.5	2594.7	1740.7	1426.4	1388.8	1341.0	1250.9	1171.1	1120.5	1116.7
42.5°	4154.3	3709.5	2455.8	1549.3	1318.5	1326.9	1268.7	1179.6	1130.8	1097.9	1094.2
45°	4453.7	3856.9	2305.7	1383.2	1238.7	1268.7	1205.9	1154.2	1125.2	1103.6	1097.9
47.5°	4777.4	4007.9	2136.8	1234.0	1171.1	1215.2	1179.6	1156.1	1140.2	1125.2	1118.6
50°	5126.5	4176.9	1978.2	1113.9	1110.1	1159.9	1176.8	1168.3	1158.9	1154.2	1148.6
52.5°	5509.4	4349.5	1844.9	1029.4	1056.6	1120.5	1177.7	1184.3	1184.3	1181.5	1177.7
55°	5768.4	4469.6	1709.8	960.9	1002.2	1088.6	1175.8	1201.2	1210.5	1206.8	1203.0
57.5°	5959.8	4535.3	1539.9	901.8	956.2	1057.6	1165.5	1203.0	1212.4	1217.1	1215.2
60°	5999.2	4474.3	1317.5	839.9	906.5	1012.5	1128.0	1174.9	1187.1	1216.2	1219.0
62.5°	5821.9	4286.6	1096.1	778.9	845.5	944.0	1077.3	1143.0	1167.4	1212.4	1217.1
64°	5604.2	4076.4	973.1	740.4	806.1	905.6	1052.0	1134.5	1166.4	1226.5	1230.3
65°	5444.6	3923.5	896.2	716.0	780.8	880.2	1037.9	1137.4	1174.9	1248.1	1253.7
67.5°	4857.2	3397.0	741.3	658.8	720.7	837.1	1040.7	1160.8	1173.0	1256.5	1255.6
70°	4019.2	2704.5	621.2	606.2	662.5	802.3	1029.4	1123.3	1124.2	1179.6	1166.4
72.5°	3009.5	1998.8	538.6	551.8	597.8	719.8	972.2	1072.6	1056.6	1064.2	1051.0
75°	2067.3	1322.2	463.6	493.6	530.2	636.2	891.5	974.1	948.7	939.3	930.0
77.5°	1103.6	731.0	385.7	436.4	460.8	549.9	777.9	857.7	831.4	794.8	782.6
80°	446.7	344.4	310.6	361.3	375.4	442.9	647.5	697.2	677.5	613.7	593.1
82.5°	224.3	206.4	244.0	284.3	285.3	316.2	481.4	528.3	484.2	406.3	388.5
85°	117.3	121.1	168.0	199.9	176.4	170.8	289.0	320.0	293.7	255.2	229.9
87.5°	42.2	48.8	88.2	87.3	61.9	32.8	63.8	31.0	16.9	10.3	13.1
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)