

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: P651317

Luminaire Tested: **GALN-SA3D-840-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651317
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3D-840-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19874.5 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

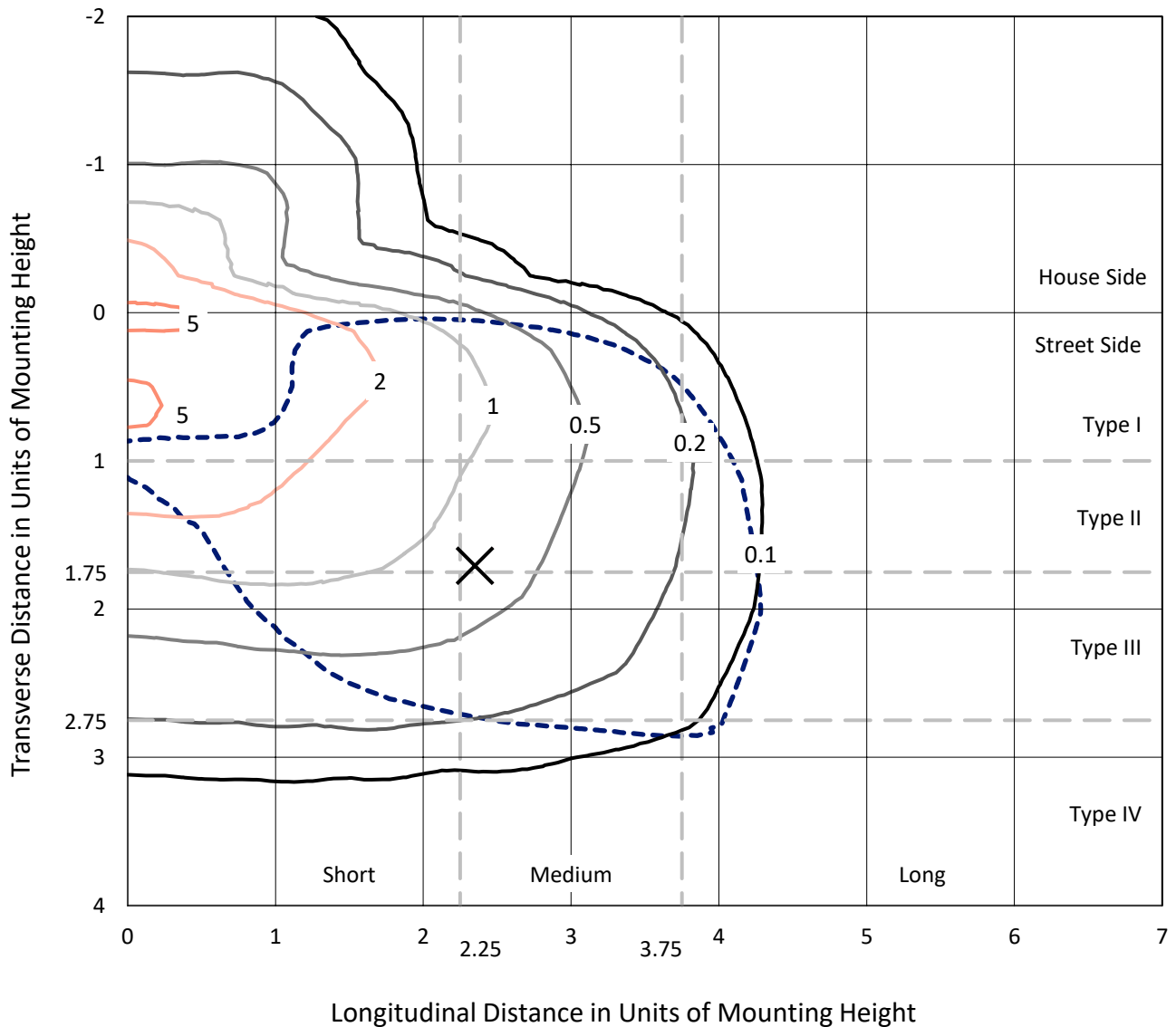
Input Watts (W): 184
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

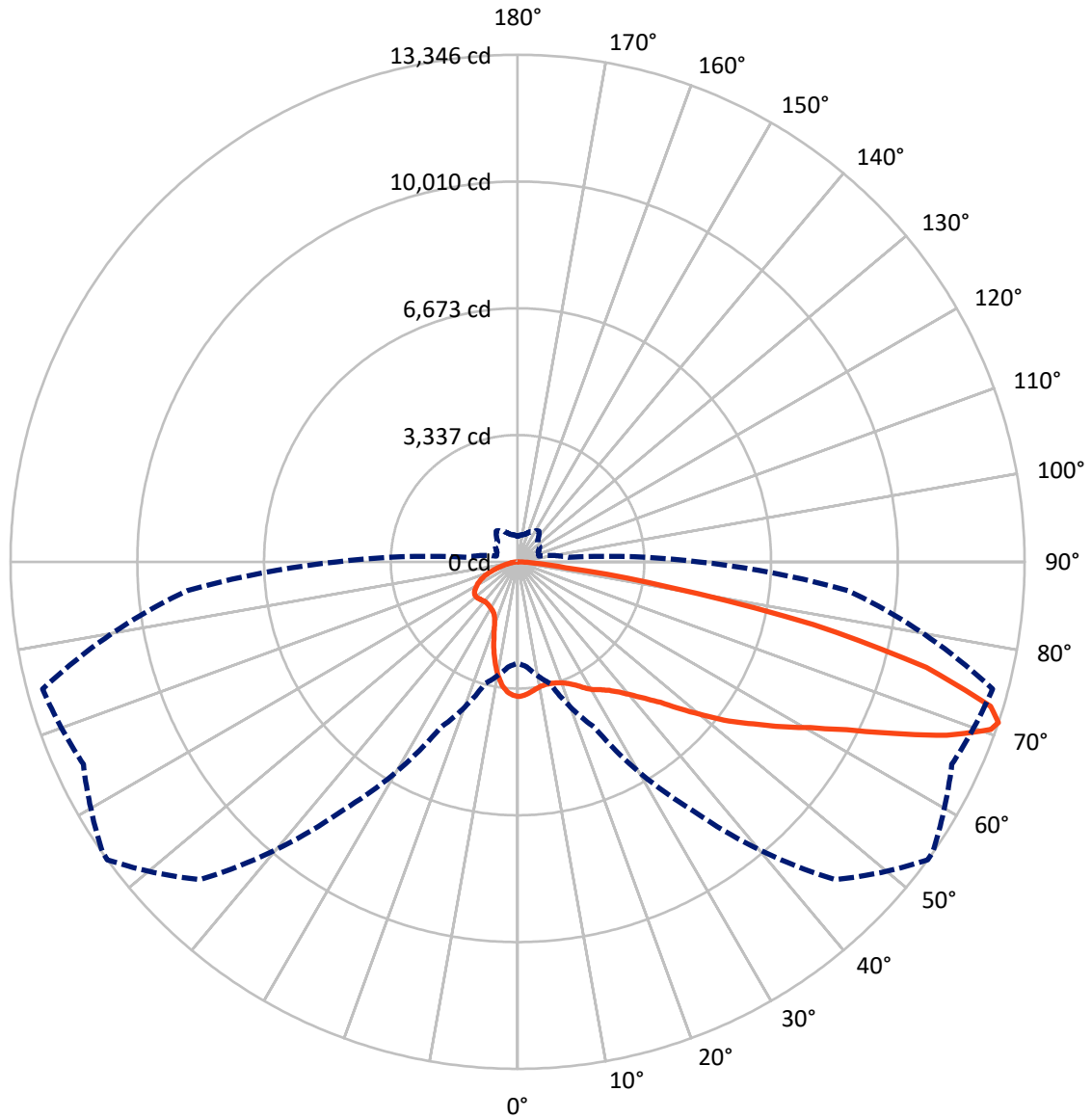
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3588.2	0.0	3588.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	16286.3	0.0	16286.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	19874.5	0.0	19874.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.0	1.6
10°-20°	834.4	4.2
20°-30°	1389.3	7.0
30°-40°	2054.3	10.3
40°-50°	2893.5	14.6
50°-60°	3874.6	19.5
60°-70°	4883.6	24.6
70°-80°	3335.5	16.8
80°-90°	293.3	1.5
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°	19874.5	100.0
0°-180°	19874.5	100.0

Coefficient of Utilization

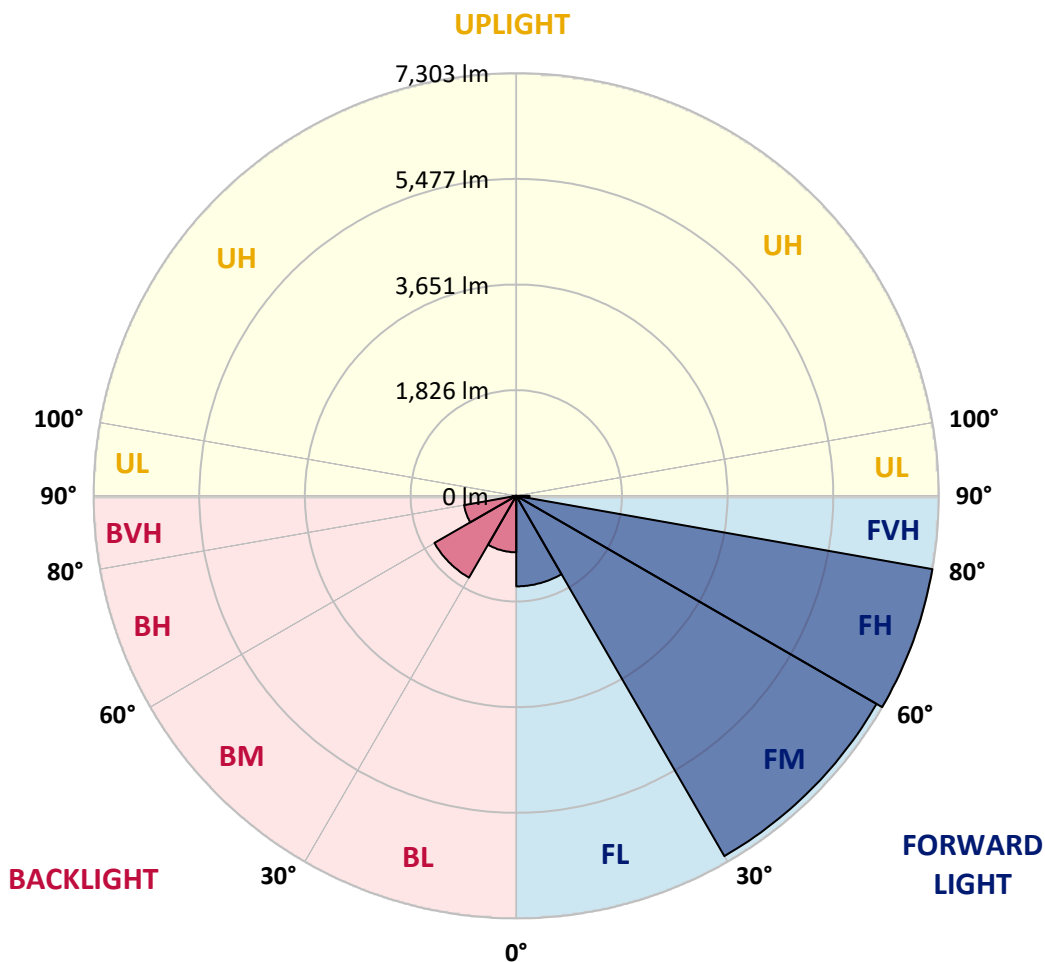


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1564.4	7.9			
FM (30°-60°)	7189.9	36.2			
FH (60°-80°)	7302.7	36.7			G3/7500
FVH (80°-90°)	229.3	1.2			G3/500
BL (0°-30°)	975.2	4.9	B2/1000		
BM (30°-60°)	1632.5	8.2	B2/2500		
BH (60°-80°)	916.4	4.6	B2/1000		G2/1000
BVH (80°-90°)	64.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9
2.5°	3425.6	3441.8	3446.1	3456.8	3479.4	3497.6	3515.9	3513.7	3539.4	3550.2	3559.9
5°	3273.3	3277.5	3293.6	3315.1	3354.8	3405.3	3454.7	3455.8	3519.1	3569.5	3594.2
7.5°	3161.6	3175.5	3186.3	3208.8	3250.7	3305.5	3383.8	3390.2	3502.9	3602.8	3655.4
10°	3088.6	3104.7	3116.5	3144.4	3186.3	3247.4	3332.3	3344.1	3491.2	3655.4	3747.7
12.5°	3022.0	3038.1	3048.9	3085.4	3140.1	3215.2	3310.8	3324.7	3495.4	3716.6	3848.7
15°	3062.8	3075.7	3071.4	3082.1	3118.6	3204.5	3319.4	3333.4	3511.6	3775.7	3948.5
17.5°	3244.2	3255.0	3219.5	3178.7	3161.6	3224.9	3346.3	3361.2	3543.7	3836.8	4050.5
20°	3511.6	3540.5	3463.2	3372.0	3289.3	3297.9	3402.0	3418.2	3588.9	3898.0	4154.6
22.5°	3859.3	3880.9	3786.4	3636.1	3483.7	3405.3	3485.8	3495.4	3656.5	3977.5	4268.4
25°	4268.4	4281.3	4150.3	3957.1	3737.0	3588.9	3600.7	3617.8	3768.1	4067.7	4369.3
27.5°	4665.6	4706.4	4555.0	4318.9	4029.0	3782.1	3758.4	3769.2	3889.5	4118.1	4439.1
30°	5136.9	5133.7	4973.8	4699.9	4328.5	3992.5	3907.7	3905.5	3954.9	4142.8	4489.5
32.5°	5512.7	5556.7	5399.9	5101.5	4671.0	4210.5	4010.7	4006.4	4005.3	4185.7	4564.7
35°	5939.9	5946.4	5802.5	5501.9	5041.4	4484.2	4154.6	4133.1	4108.5	4278.1	4666.7
37.5°	6322.0	6352.2	6220.1	5883.0	5405.3	4768.6	4352.2	4338.2	4263.0	4438.0	4829.9
40°	6620.5	6643.1	6563.7	6242.7	5763.9	5075.7	4603.4	4577.6	4486.3	4699.9	5047.8
42.5°	6718.2	6764.4	6795.5	6637.7	6176.1	5439.7	4912.5	4880.3	4810.5	5097.1	5299.0
45°	6725.7	6798.7	6963.0	6970.5	6590.5	5875.5	5273.2	5250.7	5245.3	5606.0	5652.2
47.5°	6668.9	6742.9	7018.8	7168.0	6959.8	6315.7	5793.9	5758.5	5761.7	6235.1	6048.3
50°	6531.5	6619.4	6954.4	7294.7	7248.6	6773.0	6343.6	6331.7	6398.3	6953.3	6459.5
52.5°	6272.7	6379.0	6887.9	7374.1	7463.3	7167.0	6968.4	6935.1	7103.6	7732.7	6909.3
55°	5556.7	5716.6	6644.2	7418.2	7667.2	7543.8	7530.9	7591.0	7814.3	8583.0	7404.2
57.5°	5183.1	5303.3	6114.9	7425.7	7924.9	7981.8	8187.9	8202.9	8593.7	9485.8	7963.5
60°	4979.1	5085.4	5825.0	7376.3	8284.5	8524.0	8859.9	8913.6	9354.9	10463.8	8543.2
62.5°	4800.8	4892.1	5651.1	7205.6	8690.3	9328.0	9730.5	9756.4	10219.1	11543.8	9115.4
65°	4381.1	4485.2	5301.2	7034.9	9040.3	10332.9	10885.7	10855.6	11139.0	12475.6	9474.0
67.5°	3815.4	3947.4	4647.4	6445.5	9213.2	11431.0	12186.8	12149.3	12047.2	13086.5	9577.1
70°	3092.9	3163.8	3811.1	5426.7	8522.9	12007.5	13214.2	13174.5	12609.8	13166.9	9089.7
71°	2661.3	2771.9	3318.3	4820.2	7948.5	11831.5	13346.2	13335.6	12610.9	12944.8	8722.5
72.5°	2077.3	2145.0	2628.0	3734.9	6755.8	10831.0	13019.9	13060.7	12337.1	12327.5	7965.7
75°	1314.0	1344.1	1648.9	2198.6	3707.0	7670.4	11114.4	11224.9	10954.4	10090.2	5923.8
77.5°	763.3	801.9	987.7	1295.7	1601.7	4163.2	7952.8	8073.0	7611.4	5555.6	2425.1
80°	444.5	487.4	650.6	752.5	735.4	1544.8	4049.4	4254.5	3295.8	1403.1	680.6
82.5°	246.9	275.9	457.3	458.4	391.8	504.6	1274.3	1333.3	940.4	565.7	278.0
85°	179.3	202.9	295.2	267.3	187.9	216.9	443.4	464.8	380.0	238.3	90.2
87.5°	63.3	90.2	162.1	128.8	51.6	45.1	127.7	104.1	96.6	66.5	20.4
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°	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9	3545.9
2.5°	3565.3	3567.4	3556.7	3537.3	3518.0	3493.3	3465.4	3443.9	3434.2	3433.2	3432.1
5°	3603.9	3609.2	3568.4	3508.3	3441.8	3360.2	3290.4	3210.9	3190.6	3158.4	3168.0
7.5°	3666.2	3662.9	3582.4	3454.7	3299.0	3126.2	2980.2	2895.3	2807.3	2782.6	2783.7
10°	3755.2	3734.9	3582.4	3345.2	3085.4	2828.8	2624.8	2496.0	2426.2	2368.3	2346.7
12.5°	3849.7	3798.2	3548.1	3191.7	2810.5	2496.0	2277.0	2103.1	2058.0	2010.7	2011.8
15°	3939.9	3854.1	3480.4	2975.9	2514.3	2140.7	1928.1	1824.0	1810.0	1815.4	1814.3
17.5°	4021.5	3893.7	3377.4	2735.4	2168.5	1835.7	1723.0	1730.5	1768.1	1794.9	1798.1
20°	4104.2	3917.4	3223.8	2413.3	1842.2	1651.1	1655.4	1714.5	1771.3	1807.8	1813.2
22.5°	4182.5	3928.1	3043.5	2102.0	1606.1	1572.8	1636.1	1699.4	1755.3	1790.7	1796.0
25°	4234.0	3903.4	2788.0	1776.7	1490.1	1544.8	1611.4	1665.1	1712.3	1748.8	1757.4
27.5°	4248.0	3823.9	2471.3	1513.7	1436.4	1518.0	1579.1	1618.9	1655.4	1689.7	1696.2
30°	4240.5	3707.0	2123.4	1359.1	1405.2	1486.9	1534.1	1563.1	1607.1	1633.9	1639.3
32.5°	4228.7	3570.6	1760.6	1276.5	1379.5	1457.9	1485.8	1511.5	1510.4	1499.8	1507.2
35°	4233.0	3407.4	1466.5	1227.0	1357.0	1436.4	1460.0	1427.8	1335.5	1331.2	1326.9
37.5°	4255.5	3246.4	1252.8	1192.7	1345.2	1433.1	1446.1	1297.9	1216.3	1178.7	1169.1
40°	4313.5	3058.5	1112.2	1167.0	1344.1	1457.9	1382.7	1232.4	1075.7	1002.7	997.3
42.5°	4390.8	2873.9	1026.3	1150.8	1357.0	1495.5	1357.0	1140.1	969.4	926.4	920.1
45°	4505.7	2662.4	979.1	1143.3	1376.3	1509.4	1348.4	1072.4	926.4	892.1	892.1
47.5°	4635.6	2460.6	953.3	1138.0	1400.9	1499.8	1272.2	1051.0	906.1	910.4	930.7
50°	4764.3	2285.6	934.0	1126.2	1422.5	1494.4	1241.0	1049.9	911.5	966.2	1002.7
52.5°	4913.6	2162.1	910.4	1106.8	1422.5	1460.0	1231.4	1071.4	926.4	942.6	958.7
55°	5093.9	2123.4	880.3	1065.0	1396.6	1374.1	1226.0	1102.6	937.2	899.6	906.1
57.5°	5332.3	2185.8	851.3	1012.3	1337.6	1285.0	1223.8	1111.1	912.5	881.4	875.0
60°	5609.2	2309.2	842.8	958.7	1257.1	1208.8	1211.0	1086.4	878.2	846.0	851.3
62.5°	5803.6	2383.2	837.4	917.9	1169.1	1125.1	1179.8	1056.4	863.1	835.2	840.6
65°	5803.6	2293.1	788.0	855.6	1055.3	1024.2	1142.2	1018.8	843.8	811.6	806.3
67.5°	5583.5	2030.1	712.8	762.2	929.7	909.3	1089.7	973.7	814.8	790.1	777.3
70°	5010.3	1539.5	618.4	652.7	770.8	789.0	1022.0	912.5	766.5	736.5	717.1
71°	4758.0	1340.9	578.6	596.9	709.6	736.5	989.8	886.8	745.0	702.1	667.8
72.5°	4271.6	1129.4	518.6	526.0	606.5	654.9	922.2	837.4	704.3	643.0	604.4
75°	3245.3	824.5	417.6	413.4	448.8	519.6	780.4	746.1	617.3	534.6	512.1
77.5°	1402.0	448.8	312.4	315.6	304.9	394.0	614.1	640.9	529.2	434.8	414.4
80°	425.1	258.7	213.6	217.9	203.9	264.1	432.6	502.4	425.1	338.2	310.2
82.5°	217.9	154.6	146.0	143.9	129.9	149.2	262.0	343.5	303.9	211.5	186.8
85°	94.4	82.7	71.9	69.8	61.2	53.7	93.4	171.7	161.1	118.1	112.7
87.5°	23.6	21.4	14.0	12.9	7.5	1.1	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)