

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: P651320

Luminaire Tested: **GALN-SA3D-840-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651320
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
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-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19379.2 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

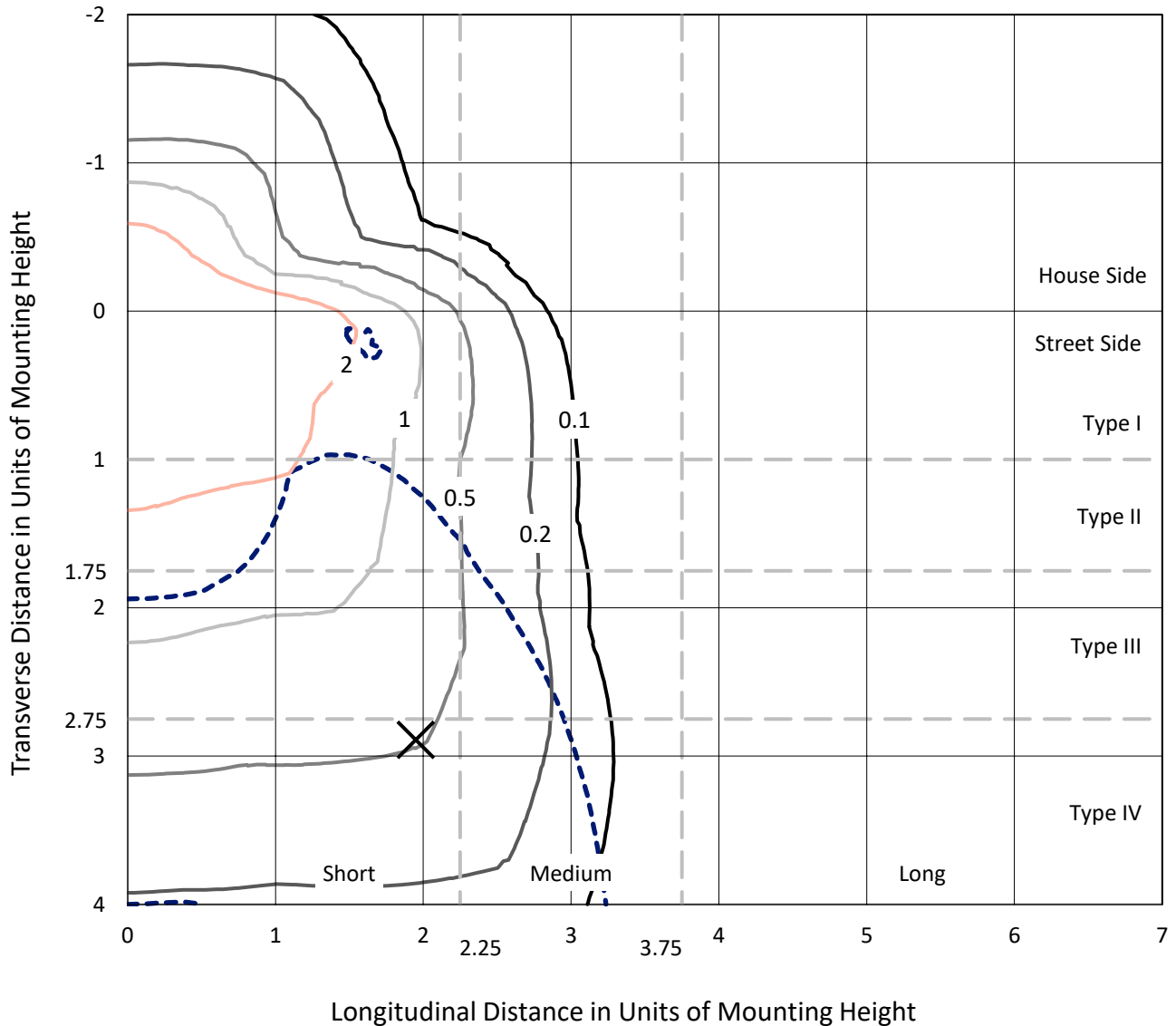
Input Watts (W): 184
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

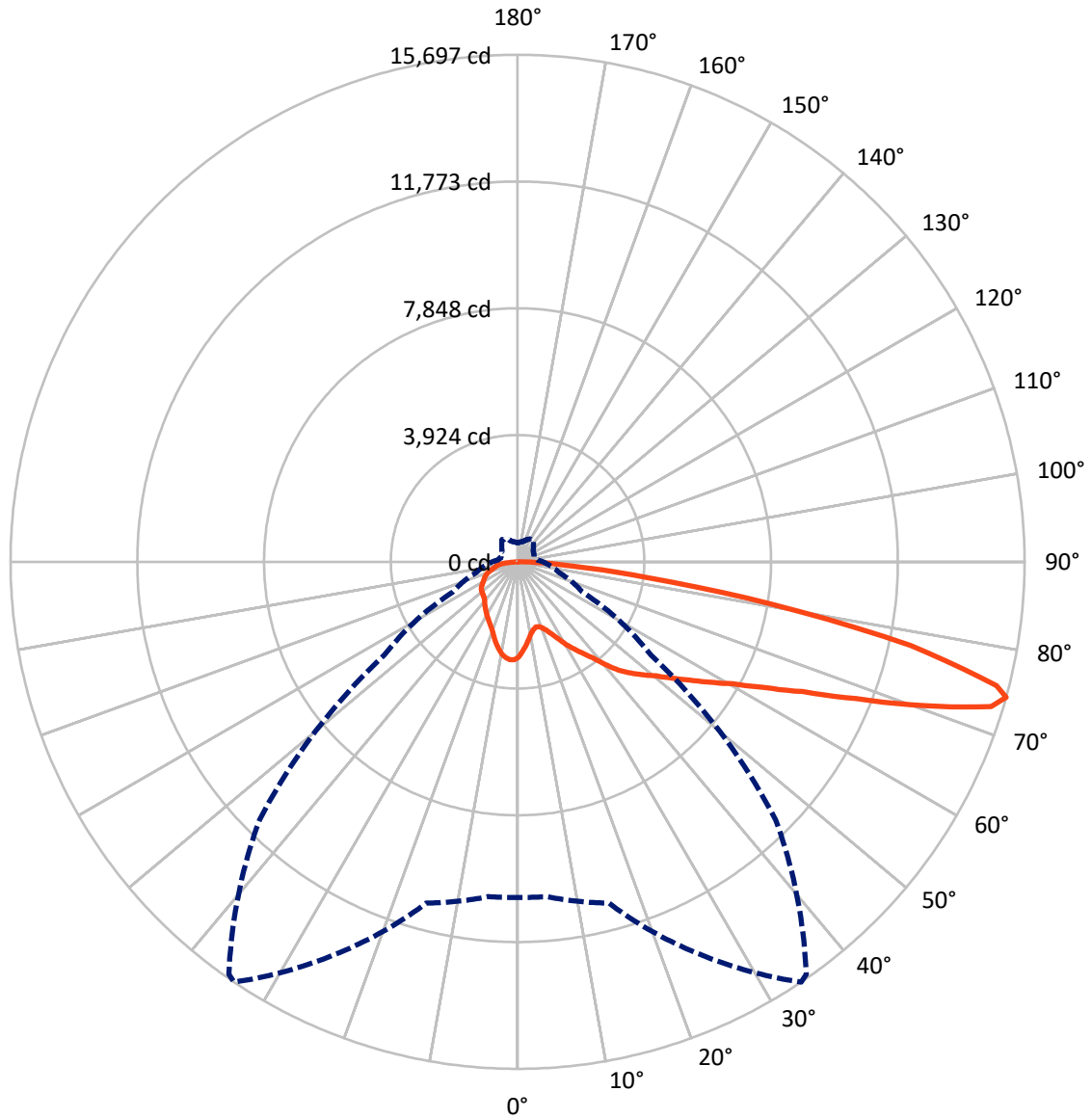
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4124.0	0.0	4124.0
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	15255.1	0.0	15255.1
	% Fixture	78.7	0.0	78.7
Total	Lumens	19379.2	0.0	19379.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.1	1.4
10°-20°	736.6	3.8
20°-30°	1214.5	6.3
30°-40°	1819.2	9.4
40°-50°	2644.6	13.6
50°-60°	3693.9	19.1
60°-70°	4624.6	23.9
70°-80°	3824.1	19.7
80°-90°	552.6	2.9
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°	19379.2	100.0
0°-180°	19379.2	100.0

Coefficient of Utilization



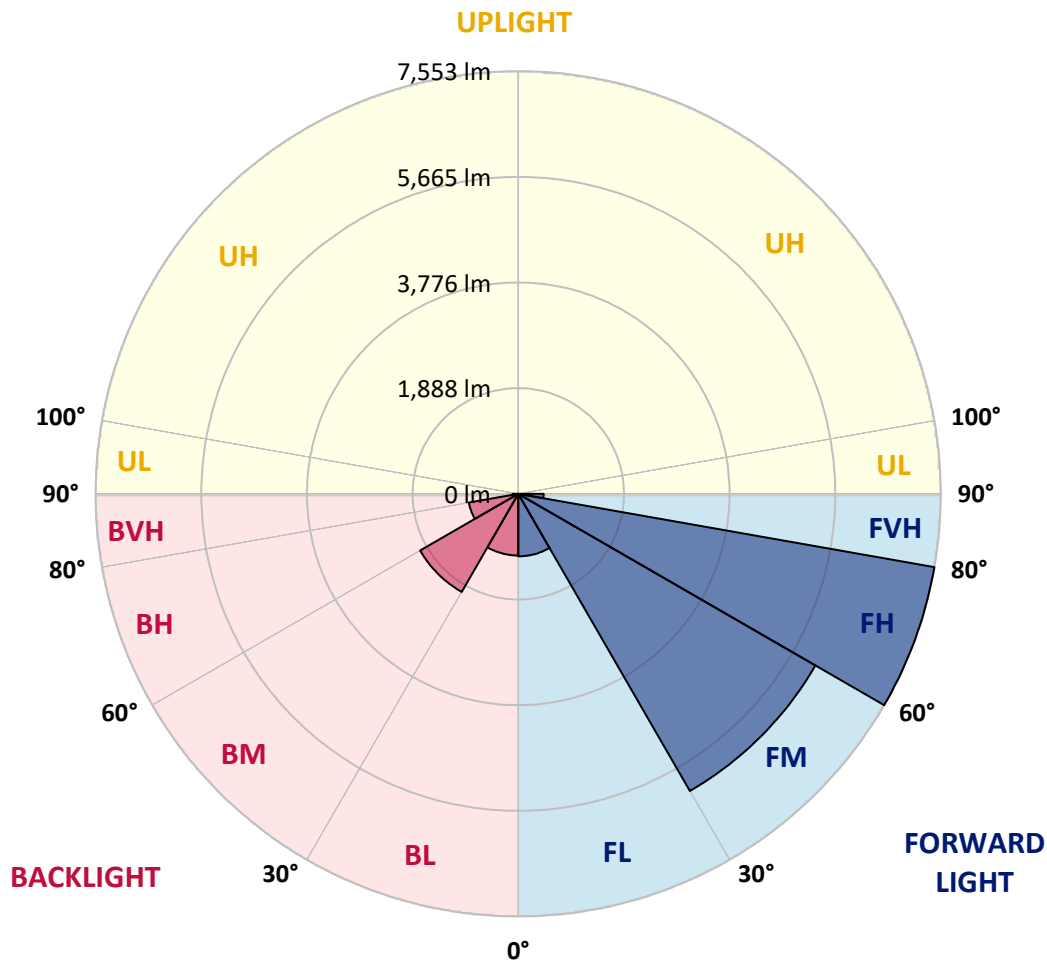
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1117.1	5.8			
FM (30°-60°)	6132.4	31.6			
FH (60°-80°)	7553.0	39.0			G4/12000
FVH (80°-90°)	452.7	2.3			G3/500
BL (0°-30°)	1103.1	5.7	B3/2500		
BM (30°-60°)	2025.3	10.5	B2/2500		
BH (60°-80°)	895.7	4.6	B2/1000		G2/1000
BVH (80°-90°)	99.9	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8
2.5°	2734.4	2748.4	2755.9	2782.8	2789.2	2797.8	2820.3	2850.4	2889.0	2923.4	2953.4
5°	2506.9	2528.3	2541.2	2564.8	2611.0	2615.3	2675.4	2744.1	2822.5	2895.5	2955.6
7.5°	2291.1	2314.7	2325.4	2368.3	2429.6	2439.2	2527.2	2635.7	2766.6	2877.2	2969.6
10°	2128.9	2140.8	2164.4	2196.5	2269.6	2276.0	2390.9	2535.8	2705.4	2868.7	2993.2
12.5°	2040.9	2047.3	2052.7	2087.0	2159.0	2168.7	2288.9	2453.1	2657.1	2875.0	3031.8
15°	2053.8	2055.9	2032.3	2038.8	2096.7	2110.7	2229.8	2398.4	2627.1	2891.2	3089.8
17.5°	2162.2	2154.7	2096.7	2066.7	2107.5	2113.9	2218.1	2376.9	2613.2	2921.2	3149.9
20°	2332.9	2322.2	2222.3	2155.7	2179.4	2184.7	2256.7	2393.1	2627.1	2970.7	3243.3
22.5°	2545.5	2541.2	2389.8	2309.3	2308.2	2308.2	2345.8	2451.0	2668.9	3038.3	3341.0
25°	2842.8	2820.3	2622.7	2518.6	2489.7	2487.5	2483.2	2546.5	2722.7	3110.2	3456.9
27.5°	3147.8	3109.1	2933.1	2773.1	2710.8	2703.3	2675.4	2681.9	2791.4	3191.8	3589.1
30°	3421.5	3396.8	3231.5	3054.3	2980.3	2963.1	2885.8	2850.4	2906.2	3338.9	3799.5
32.5°	3630.8	3615.9	3487.0	3326.0	3216.5	3213.3	3100.5	3071.5	3085.5	3517.1	4039.9
35°	3800.5	3805.9	3740.3	3600.8	3475.2	3456.9	3381.8	3345.3	3304.5	3774.7	4342.7
37.5°	4032.4	4044.2	4039.9	3919.6	3766.2	3770.5	3753.3	3693.2	3584.7	4062.5	4678.7
40°	4287.9	4296.5	4295.4	4249.2	4168.8	4173.0	4166.6	4097.9	3935.8	4428.5	5052.3
42.5°	4641.1	4600.4	4494.1	4540.2	4587.5	4607.8	4651.9	4586.4	4364.1	4819.4	5403.3
45°	5036.2	4958.9	4718.4	4739.9	4914.9	4953.6	5196.2	5106.0	4829.0	5268.1	5816.7
47.5°	5285.3	5209.1	5006.1	5001.8	5233.7	5271.3	5700.8	5667.5	5252.0	5752.3	6321.3
50°	5507.5	5496.8	5268.1	5322.9	5549.4	5605.2	6250.5	6219.3	5673.9	6323.5	6871.0
52.5°	5837.1	5750.2	5567.7	5680.4	5979.9	6052.9	6795.9	6704.5	6061.5	6828.0	7404.6
55°	5985.2	5964.9	5954.1	6051.8	6463.0	6515.6	7326.2	7116.8	6392.2	7255.3	7810.4
57.5°	6381.4	6343.8	6450.1	6516.7	7032.0	7112.5	7880.2	7547.3	6682.0	7594.6	8007.9
60°	6894.6	6874.2	6971.9	7092.2	7667.6	7789.9	8511.4	7914.5	6915.0	7765.3	7899.5
62.5°	7661.2	7659.0	7640.7	7898.4	8568.4	8681.1	9236.1	8272.0	6951.5	7637.5	7339.1
65°	8760.5	8721.8	8563.0	8844.2	9689.2	9821.2	9990.8	8471.7	6731.4	6981.6	6179.6
67.5°	9910.3	9908.2	9779.3	10144.4	11298.5	11434.8	10934.5	8427.7	6120.5	5655.6	4388.8
70°	10863.7	10817.5	10981.8	11954.4	13354.4	13512.2	11760.1	7909.1	4875.2	3735.0	2607.8
72.5°	11092.4	11094.5	11435.9	13350.1	15328.7	15353.4	12057.5	6410.4	3262.7	2060.2	1304.4
74°	10388.0	10406.3	10935.6	13419.8	15696.9	15585.3	11297.4	5038.3	2206.2	1345.2	940.5
75°	9481.9	9367.1	10132.5	12955.0	15314.8	15194.5	10407.4	4043.1	1683.4	1074.6	823.4
77.5°	5069.5	5186.5	6367.5	9667.7	12441.8	12303.3	7056.7	1938.9	909.3	748.3	592.7
80°	1804.7	1990.4	2797.8	5058.8	7976.8	8019.7	3367.9	888.9	639.8	551.9	418.7
82.5°	736.5	756.9	1201.4	2244.9	4050.7	4089.3	1375.3	528.2	457.3	380.0	250.1
85°	287.7	296.3	531.4	1009.2	1728.5	1841.2	475.6	279.1	281.3	217.9	127.7
87.5°	96.6	109.5	217.9	336.1	587.3	575.4	138.5	82.7	100.9	94.4	39.7
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°	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8	2958.8
2.5°	2968.5	2988.9	3002.8	3017.8	3031.8	3036.1	3032.9	3042.6	3043.7	3044.7	3045.8
5°	2985.6	3013.6	3040.4	3055.4	3061.9	3056.5	3038.3	3028.6	3020.0	3013.6	3015.7
7.5°	3009.3	3049.0	3073.7	3080.2	3062.9	3038.3	2993.2	2957.7	2935.2	2920.2	2919.1
10°	3045.8	3084.5	3104.8	3086.6	3039.4	2979.2	2908.3	2841.8	2791.4	2776.3	2775.2
12.5°	3091.9	3135.9	3134.9	3081.2	2998.5	2891.2	2776.3	2699.0	2630.3	2595.9	2609.9
15°	3152.1	3185.4	3154.2	3057.6	2926.6	2779.5	2637.8	2532.6	2455.3	2418.8	2421.0
17.5°	3221.9	3250.8	3168.1	3015.7	2825.7	2636.7	2472.5	2372.6	2311.4	2284.6	2282.5
20°	3308.8	3317.4	3168.1	2942.7	2695.8	2470.4	2313.6	2243.8	2209.5	2195.5	2199.8
22.5°	3402.2	3385.0	3151.0	2839.6	2525.1	2296.4	2191.2	2160.0	2142.9	2140.8	2142.9
25°	3507.4	3459.1	3115.6	2700.1	2346.9	2146.1	2084.9	2090.3	2093.5	2093.5	2101.0
27.5°	3636.2	3539.6	3056.5	2524.0	2138.6	2006.5	1989.4	2027.0	2044.1	2047.3	2052.7
30°	3805.9	3627.7	2958.8	2303.9	1961.5	1880.9	1911.0	1961.5	1980.8	1992.6	1990.4
32.5°	4007.7	3724.3	2826.8	2083.8	1818.7	1792.9	1829.4	1880.9	1902.4	1908.8	1900.2
35°	4244.9	3833.8	2652.9	1877.7	1694.1	1709.2	1752.1	1768.2	1787.5	1787.5	1791.8
37.5°	4500.5	3921.8	2440.2	1688.7	1597.5	1652.2	1683.4	1668.4	1659.8	1649.0	1654.4
40°	4760.3	3987.3	2164.4	1501.9	1500.8	1593.2	1601.8	1558.9	1524.5	1513.8	1508.4
42.5°	4986.8	4028.1	1915.3	1357.0	1409.6	1535.2	1541.6	1472.9	1418.2	1386.0	1375.3
45°	5254.1	4075.3	1671.6	1236.8	1324.8	1489.1	1505.1	1412.9	1332.3	1264.7	1247.5
47.5°	5620.2	4182.7	1479.4	1143.3	1263.6	1460.1	1482.6	1363.4	1257.2	1169.2	1155.2
50°	6033.6	4329.8	1330.2	1080.0	1216.3	1434.3	1462.2	1313.0	1187.4	1089.7	1078.9
52.5°	6412.5	4409.2	1201.4	1023.2	1170.3	1387.1	1435.4	1276.5	1118.7	1010.2	1000.6
55°	6619.8	4280.4	1074.6	967.3	1106.8	1325.9	1397.8	1226.0	1052.1	968.4	954.5
57.5°	6647.7	4014.2	959.7	907.2	1040.3	1250.7	1328.0	1164.9	1009.2	939.4	927.6
60°	6431.9	3616.9	870.7	857.8	972.7	1165.9	1249.6	1111.1	965.1	907.2	895.4
62.5°	5895.1	3185.4	808.5	812.7	904.0	1076.8	1191.7	1059.7	923.2	871.8	861.0
65°	4971.8	2629.2	748.3	766.6	842.8	1007.0	1139.1	1016.7	881.5	845.0	835.3
67.5°	3453.7	1898.1	698.9	718.2	784.8	936.2	1077.9	970.5	834.2	814.8	799.8
70°	1912.1	1168.1	640.9	663.5	724.7	856.7	1009.2	900.7	765.5	756.9	735.4
72.5°	1004.9	744.0	575.4	600.1	643.1	754.7	904.0	824.5	697.9	661.4	633.4
74°	784.8	609.8	531.4	557.2	586.2	694.6	841.7	769.8	649.5	606.6	585.1
75°	683.9	543.2	493.8	527.1	552.9	653.8	793.4	731.1	622.7	581.9	562.5
77.5°	483.2	406.9	403.7	443.4	457.3	573.3	715.0	665.7	555.1	512.1	493.8
80°	339.3	304.9	319.9	344.6	364.0	506.7	663.5	575.4	455.2	404.8	398.3
82.5°	221.2	199.7	228.7	251.2	257.7	373.6	535.7	437.0	331.8	269.5	250.1
85°	102.0	99.8	130.9	127.7	126.7	182.5	317.8	255.5	191.1	142.8	134.2
87.5°	25.7	24.7	32.2	26.8	32.2	27.9	29.0	7.5	1.1	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)