

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: P451834

Luminaire Tested: **GALN-SA2D-727-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451834
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-727-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13259 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

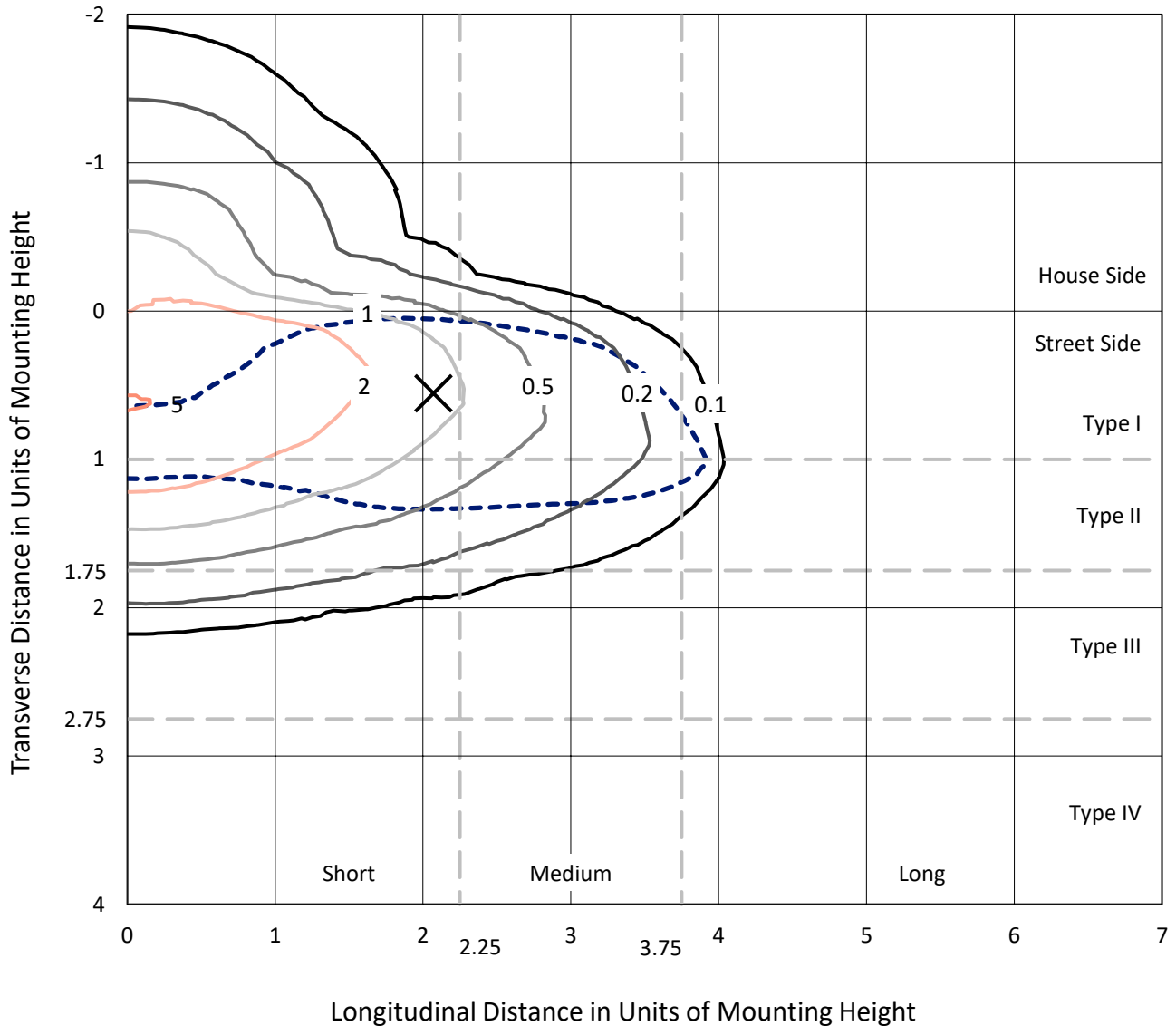
Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

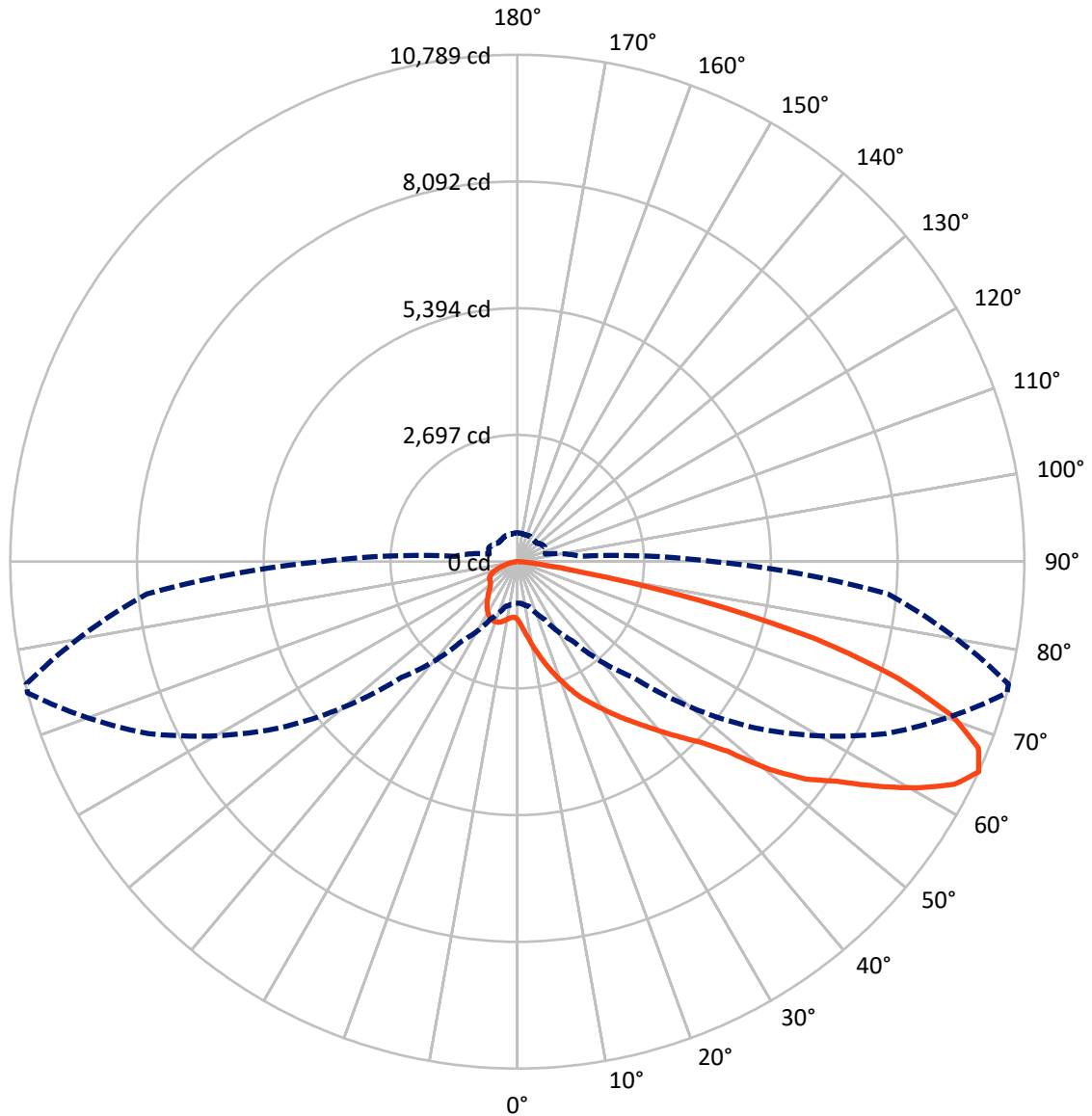
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2229.0	0.0	2229.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	11030.0	0.0	11030.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	13259.0	0.0	13259.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	1.1
10°-20°	586.3	4.4
20°-30°	1132.5	8.5
30°-40°	1839.4	13.9
40°-50°	2530.3	19.1
50°-60°	2987.5	22.5
60°-70°	2617.5	19.7
70°-80°	1249.6	9.4
80°-90°	166.3	1.3
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°	13259.0	100.0
0°-180°	13259.0	100.0

Coefficient of Utilization



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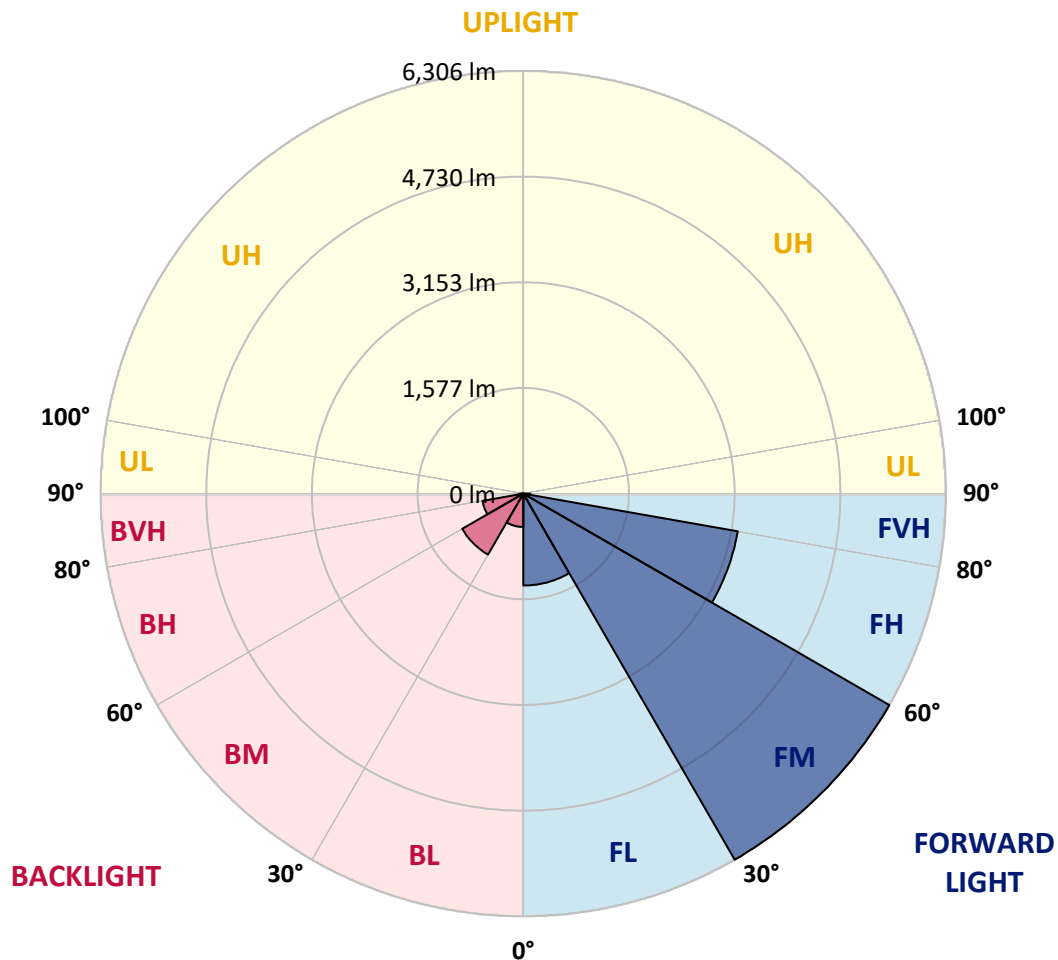
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1370.8	10.3			
FM (30°-60°)	6306.3	47.6			
FH (60°-80°)	3249.0	24.5			G2/5000
FVH (80°-90°)	103.9	0.8			G2/225
BL (0°-30°)	497.6	3.8	B1/500		
BM (30°-60°)	1051.0	7.9	B2/2500		
BH (60°-80°)	618.1	4.7	B2/1000		G2/1000
BVH (80°-90°)	62.4	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9
2.5°	1636.8	1626.0	1614.5	1582.9	1549.1	1511.0	1456.3	1403.8	1334.0	1331.9	1280.1
5°	2090.6	2083.4	2032.4	2002.9	1924.5	1820.2	1731.7	1594.4	1467.1	1452.0	1351.3
7.5°	2507.7	2479.7	2460.3	2407.0	2329.4	2195.6	2024.4	1838.9	1626.0	1605.9	1439.0
10°	2822.0	2819.1	2809.1	2763.0	2704.8	2571.7	2381.9	2115.8	1827.4	1787.8	1545.5
12.5°	3057.2	3059.3	3057.9	3057.2	3015.5	2902.5	2696.9	2416.4	2030.9	2002.9	1668.5
15°	3211.8	3233.4	3242.0	3278.0	3281.5	3206.0	3029.1	2706.9	2260.3	2218.6	1800.8
17.5°	3313.9	3324.7	3365.0	3426.1	3475.7	3462.1	3304.6	2975.9	2494.8	2425.0	1938.1
20°	3411.7	3430.4	3461.3	3544.8	3632.5	3672.8	3562.0	3251.3	2727.1	2682.5	2089.9
22.5°	3615.2	3641.8	3652.6	3695.1	3769.9	3841.1	3790.7	3515.3	2981.7	2921.2	2251.0
25°	3959.7	3987.8	3957.6	3947.5	3971.9	4007.2	3996.4	3764.1	3221.9	3135.6	2403.4
27.5°	4408.5	4412.1	4353.1	4297.0	4236.6	4218.6	4185.5	3984.9	3430.4	3358.5	2556.6
30°	4890.3	4873.1	4775.3	4673.8	4571.7	4471.0	4376.1	4197.8	3662.7	3580.0	2706.9
32.5°	5337.6	5328.3	5219.7	5062.2	4889.6	4794.7	4602.7	4412.8	3911.5	3831.7	2861.6
35°	5672.8	5686.4	5567.1	5395.2	5206.8	5122.6	4880.2	4638.6	4169.0	4082.0	3029.8
37.5°	5910.8	5903.6	5797.9	5649.0	5483.6	5410.3	5204.6	4885.3	4445.9	4362.5	3213.9
40°	5995.7	5991.4	5913.0	5804.4	5699.4	5673.5	5544.0	5151.4	4763.0	4665.2	3435.4
42.5°	5941.7	5951.1	5899.3	5869.8	5850.4	5869.1	5881.3	5500.2	5108.9	5019.0	3675.6
45°	5776.3	5771.3	5764.1	5812.3	5921.6	6044.6	6215.0	5829.5	5485.1	5413.2	3997.8
47.5°	5480.8	5516.7	5534.7	5667.7	5906.5	6197.8	6599.1	6271.1	6030.9	5968.3	4489.0
50°	5067.2	5096.0	5202.4	5439.0	5795.0	6255.3	6974.5	6993.2	6941.4	6824.2	5022.6
52.5°	4421.4	4466.0	4685.4	5119.0	5566.3	6231.6	7201.7	7612.4	7680.7	7592.9	5548.4
55°	3698.7	3761.2	3992.8	4561.7	5251.3	6102.1	7358.5	7971.2	8243.8	8162.5	6054.6
57.5°	2991.0	3057.2	3295.2	3846.1	4701.9	5815.9	7461.3	8371.1	9010.4	8904.7	6684.6
60°	2241.6	2310.7	2514.9	3082.3	3919.4	5256.4	7391.6	8717.7	9776.3	9731.0	7315.3
62.5°	1446.2	1522.5	1700.1	2169.7	3012.6	4491.9	7018.3	8909.0	10439.4	10384.7	7775.6
65°	881.0	889.6	987.4	1347.0	2061.8	3477.9	6164.7	8655.1	10788.9	10772.4	7915.8
67.5°	569.6	583.2	627.8	806.9	1236.2	2415.7	4929.2	7817.3	10584.7	10578.9	7626.0
70°	481.1	485.4	505.6	544.4	718.4	1464.9	3461.3	6481.8	9808.7	9808.7	6929.1
72.5°	430.1	435.8	443.0	455.2	512.8	829.9	2065.4	5045.7	8468.9	8525.0	5897.9
75°	390.5	389.1	393.4	395.5	437.3	542.2	1068.0	3731.7	6551.6	6439.4	4271.1
77.5°	334.4	336.6	334.4	343.8	386.2	412.8	542.2	2504.1	3970.5	3825.2	2143.8
80°	274.7	278.3	281.9	287.7	330.1	313.6	325.8	1141.3	1468.5	1437.6	662.4
82.5°	206.4	211.4	217.2	230.9	259.6	207.1	205.7	487.6	530.0	485.4	243.8
85°	83.4	98.5	148.9	162.5	163.3	113.6	126.6	203.5	216.5	211.4	95.6
87.5°	19.4	23.0	48.2	72.6	66.9	42.4	46.7	66.2	75.5	69.8	32.4
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°	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9	1231.9
2.5°	1256.4	1231.2	1188.1	1155.0	1131.2	1110.4	1097.4	1089.5	1086.7	1085.9	1086.7
5°	1298.8	1254.2	1185.9	1142.8	1119.0	1105.4	1097.4	1096.7	1097.4	1098.2	1096.0
7.5°	1357.1	1293.1	1203.9	1163.6	1145.6	1135.6	1132.0	1130.5	1131.2	1130.5	1130.5
10°	1434.7	1347.0	1239.1	1197.4	1182.3	1170.8	1165.0	1161.5	1158.6	1155.7	1154.3
12.5°	1520.3	1406.7	1277.2	1237.0	1215.4	1197.4	1184.5	1175.1	1168.6	1162.2	1160.7
15°	1616.0	1470.0	1319.7	1263.6	1232.6	1206.0	1183.7	1168.6	1157.1	1147.8	1147.1
17.5°	1707.3	1529.7	1348.4	1275.8	1230.5	1193.1	1163.6	1142.8	1128.4	1116.1	1114.7
20°	1805.1	1586.5	1361.4	1267.9	1208.9	1163.6	1124.8	1099.6	1083.1	1069.4	1067.2
22.5°	1903.6	1634.7	1359.9	1242.7	1171.5	1118.3	1077.3	1050.7	1031.3	1017.6	1012.6
25°	1997.8	1673.5	1342.0	1202.4	1119.7	1064.4	1022.7	998.2	980.9	964.4	964.4
27.5°	2082.7	1696.5	1308.2	1153.5	1066.5	1008.3	975.2	952.9	937.1	926.3	919.8
30°	2166.1	1707.3	1262.1	1091.7	1010.4	960.8	934.2	921.2	906.9	894.6	893.2
32.5°	2240.9	1705.1	1204.6	1031.3	957.2	922.0	911.2	901.1	886.0	868.8	864.4
35°	2313.6	1690.8	1136.3	965.1	912.6	899.0	901.8	887.4	860.1	838.5	834.9
37.5°	2392.7	1664.9	1061.5	911.2	875.2	888.2	895.4	863.7	819.1	785.3	777.4
40°	2484.0	1635.4	983.8	857.2	845.7	878.1	878.1	819.8	758.7	737.9	732.1
42.5°	2591.1	1610.9	919.1	811.9	821.3	853.6	850.1	761.6	736.4	725.6	722.8
45°	2760.9	1602.3	852.2	772.4	801.1	824.9	795.4	741.5	727.1	718.4	715.6
47.5°	3029.1	1612.4	793.2	742.9	778.1	796.1	734.3	727.8	717.7	705.5	704.1
50°	3278.0	1603.0	751.5	726.4	758.0	761.6	709.1	711.3	705.5	691.8	689.0
52.5°	3481.5	1573.5	724.9	717.7	740.7	701.2	685.4	693.3	691.1	673.9	671.0
55°	3705.1	1555.6	712.0	717.7	729.2	648.7	663.1	674.6	671.7	659.5	658.8
57.5°	3976.3	1559.1	702.6	719.9	717.7	622.1	640.8	654.4	653.7	650.1	650.1
60°	4253.9	1560.6	688.2	719.2	704.1	601.2	617.8	637.2	638.6	640.8	640.8
62.5°	4345.9	1498.0	660.2	706.2	673.9	581.1	596.2	622.8	621.4	627.1	627.8
65°	4174.0	1324.7	618.5	676.7	635.0	566.7	579.6	604.1	596.2	611.3	614.2
67.5°	3799.3	1096.0	553.8	623.5	591.9	551.6	568.9	578.2	563.8	593.3	594.0
70°	3283.7	855.8	471.8	548.0	543.0	535.8	560.2	545.8	525.7	561.7	554.5
72.5°	2745.8	653.7	376.8	448.0	477.5	512.0	545.1	504.1	476.1	486.9	473.9
75°	2062.6	483.3	302.8	351.0	397.7	478.2	531.5	453.8	410.6	400.6	397.7
77.5°	1051.4	315.7	226.5	262.5	298.5	432.2	512.8	394.8	340.2	324.3	317.2
80°	375.4	196.3	159.7	181.2	201.4	371.8	448.0	326.5	263.9	261.1	263.9
82.5°	174.0	126.6	107.2	118.7	119.4	248.1	341.6	243.8	200.6	304.9	257.5
85°	74.8	63.3	60.4	59.0	54.7	110.8	192.0	130.9	204.2	91.3	84.1
87.5°	22.3	25.2	22.3	16.5	12.2	12.2	19.4	7.2	5.0	3.6	3.6
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)