

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: P451281

Luminaire Tested: **GALN-SA2A-827-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451281
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-SA2A-827-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6799 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

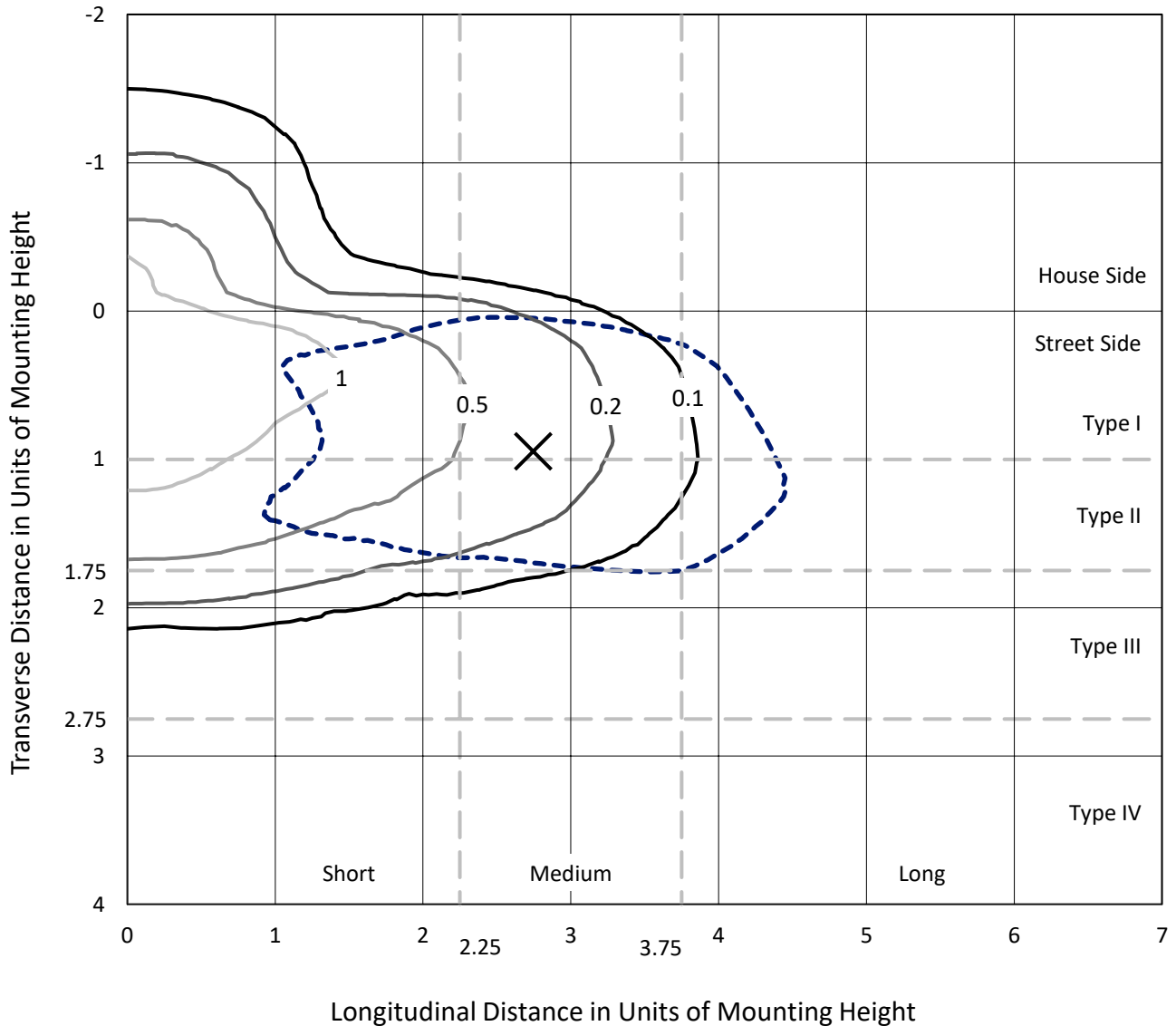
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

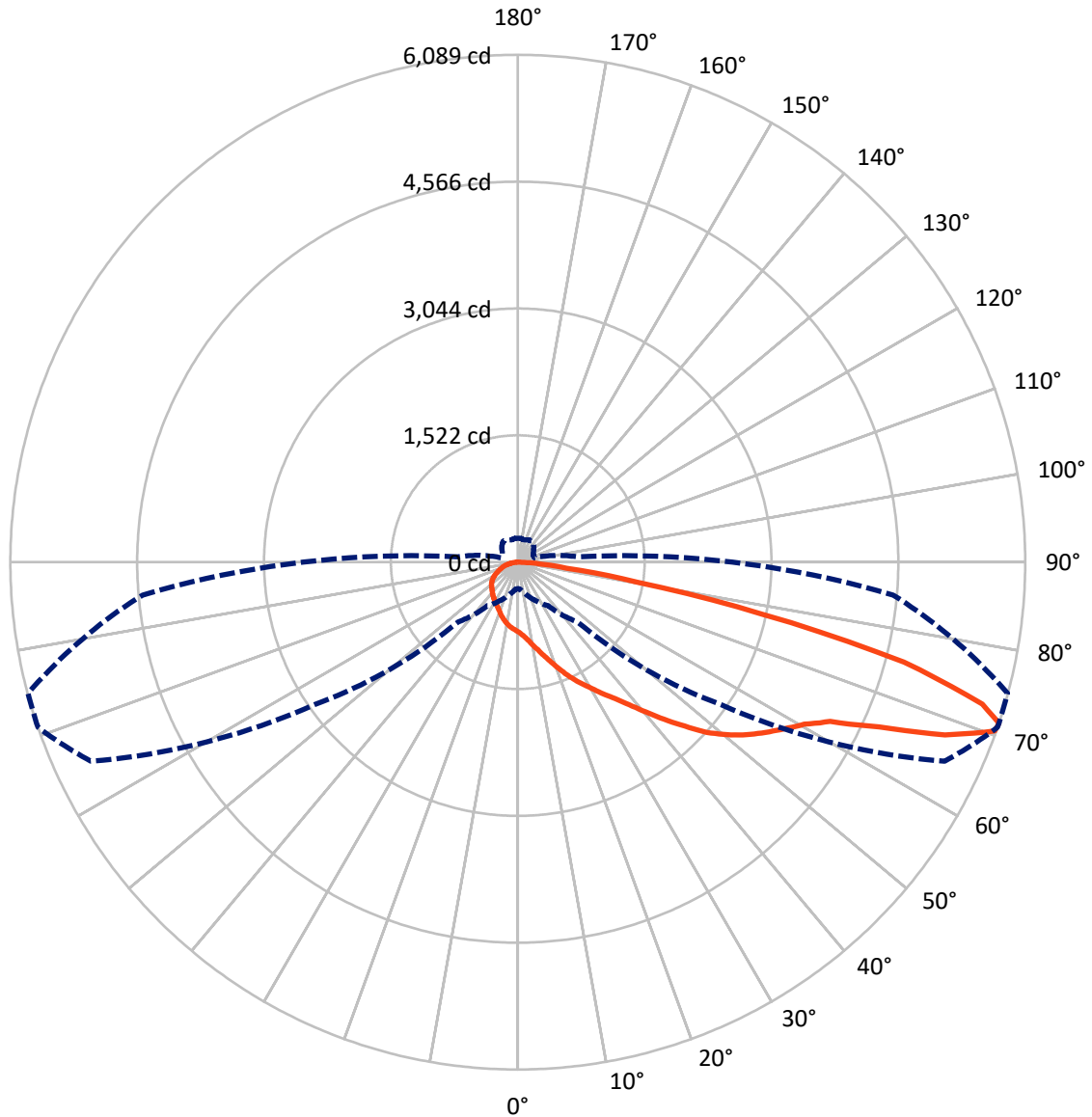
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 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	1222.8	0.0	1222.8
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	5576.2	0.0	5576.2
	% Fixture	82.0	0.0	82.0
Total	Lumens	6799.0	0.0	6799.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	1.2
10°-20°	272.2	4.0
20°-30°	475.7	7.0
30°-40°	707.5	10.4
40°-50°	1042.5	15.3
50°-60°	1459.5	21.5
60°-70°	1632.4	24.0
70°-80°	997.1	14.7
80°-90°	128.3	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°	6799.0	100.0
0°-180°	6799.0	100.0

Coefficient of Utilization



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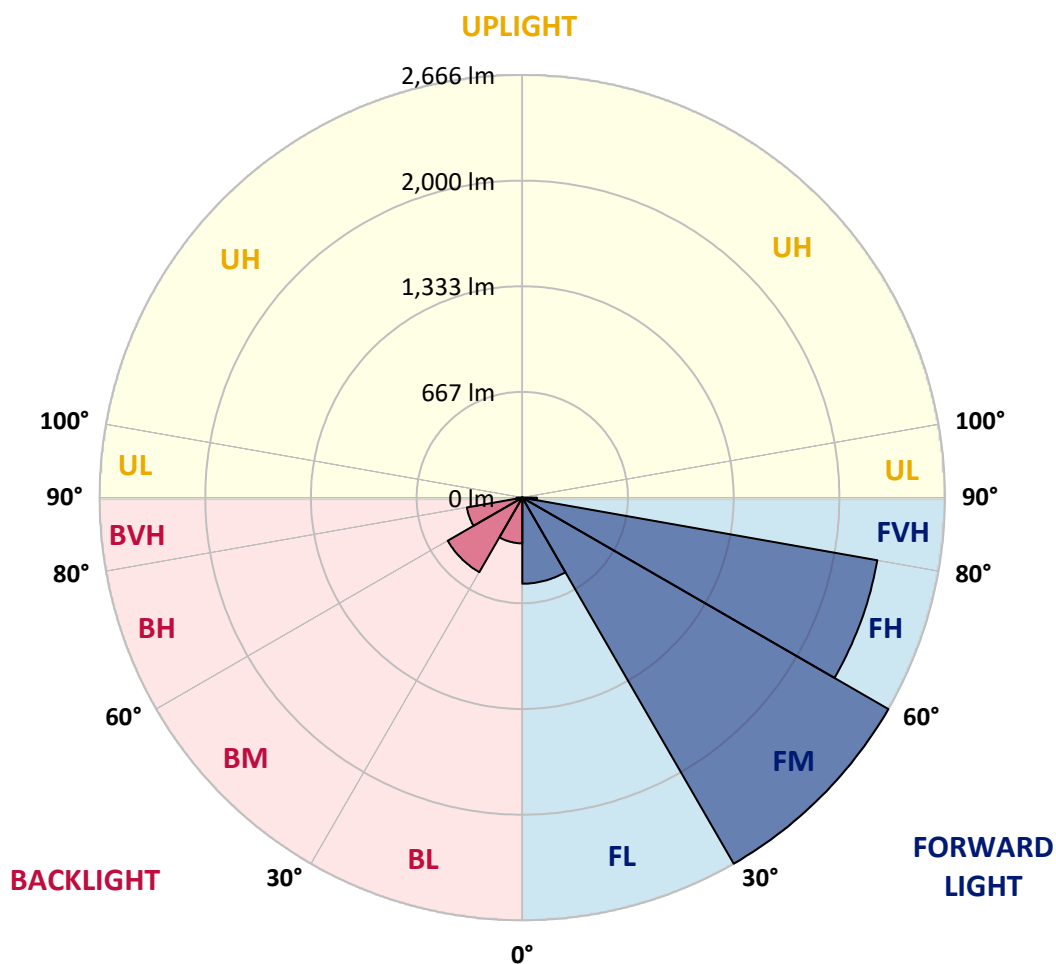
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.2	8.0			
FM	(30°-60°)	2666.4	39.2			
FH	(60°-80°)	2274.2	33.4			G2/5000
FVH	(80°-90°)	92.3	1.4			G1/100
BL	(0°-30°)	288.4	4.2	B1/500		
BM	(30°-60°)	543.1	8.0	B1/1000		
BH	(60°-80°)	355.3	5.2	B1/500		G1/500
BVH	(80°-90°)	36.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4
2.5°	926.4	921.9	922.3	915.9	907.7	898.7	886.0	874.8	865.8	860.6	845.3
5°	1026.5	1022.0	1016.4	1002.6	996.6	974.6	946.5	921.1	901.7	890.9	860.2
7.5°	1107.6	1106.5	1105.0	1097.1	1081.8	1051.2	1027.3	983.2	954.4	933.8	881.5
10°	1157.7	1159.6	1160.7	1162.2	1155.8	1139.7	1106.9	1051.2	1014.6	988.4	909.2
12.5°	1183.1	1185.0	1191.3	1205.1	1213.7	1211.9	1185.0	1130.4	1080.0	1045.6	938.7
15°	1198.8	1201.8	1213.0	1231.3	1260.1	1278.4	1265.3	1214.9	1159.6	1118.8	973.8
17.5°	1216.0	1219.3	1231.7	1257.8	1295.6	1335.2	1349.4	1306.0	1245.9	1197.3	1013.1
20°	1225.7	1230.2	1247.7	1282.1	1326.2	1383.8	1430.8	1408.1	1342.3	1288.5	1058.3
22.5°	1241.4	1245.1	1260.1	1296.7	1349.4	1421.5	1512.3	1507.5	1449.5	1380.0	1108.0
25°	1284.0	1290.0	1297.4	1319.5	1370.3	1460.0	1579.9	1613.6	1553.4	1475.7	1153.6
27.5°	1364.3	1369.2	1368.8	1371.8	1400.6	1493.3	1638.6	1718.6	1656.6	1572.5	1197.7
30°	1455.9	1457.8	1459.2	1452.5	1458.9	1527.3	1692.4	1822.5	1760.4	1671.9	1236.2
32.5°	1567.2	1571.0	1558.3	1541.1	1535.9	1577.7	1736.9	1926.4	1883.4	1772.8	1274.3
35°	1698.8	1708.5	1682.7	1652.4	1631.1	1650.2	1796.7	2032.5	2009.3	1901.7	1324.7
37.5°	1849.0	1861.0	1837.0	1777.6	1747.4	1752.6	1874.8	2163.6	2168.5	2048.6	1399.8
40°	1971.9	1987.6	1988.4	1904.3	1858.3	1864.3	1973.8	2304.9	2360.6	2230.2	1488.4
42.5°	2053.0	2068.4	2084.4	2035.1	1986.9	2020.9	2089.3	2458.1	2576.6	2450.6	1612.1
45°	2142.0	2155.8	2164.8	2142.3	2115.4	2203.6	2228.7	2621.0	2806.8	2696.9	1747.4
47.5°	2245.1	2260.4	2269.0	2247.7	2237.6	2363.9	2378.9	2773.1	3052.6	2936.1	1896.8
50°	2382.6	2394.2	2389.7	2376.3	2374.0	2486.9	2523.1	2915.5	3255.6	3193.5	2051.9
52.5°	2553.8	2567.6	2572.5	2553.4	2544.8	2574.7	2639.4	3045.2	3440.2	3414.8	2217.5
55°	2657.3	2679.3	2753.3	2783.2	2803.8	2688.3	2764.5	3188.3	3605.7	3647.9	2395.3
57.5°	2524.6	2553.0	2718.6	2868.0	3061.2	2972.3	2942.0	3337.8	3771.2	3874.0	2608.3
60°	2201.0	2207.4	2420.7	2696.2	3084.8	3337.4	3312.4	3575.4	3950.6	4102.0	2889.0
62.5°	1526.9	1540.3	1792.6	2232.0	2794.1	3468.9	3942.4	3985.7	4207.7	4443.1	3300.4
65°	787.4	769.8	999.6	1402.8	2106.5	3156.5	4452.9	4740.2	4765.3	4976.8	3879.6
67.5°	484.7	492.5	600.1	819.1	1245.5	2294.1	4399.4	5662.1	5530.2	5631.8	4417.4
70°	364.0	373.7	447.7	560.5	759.3	1311.6	3538.1	5885.6	6069.8	6043.6	4581.0
71°	316.5	326.6	403.6	510.1	637.9	1012.3	2980.9	5651.6	6088.5	6084.0	4519.4
72.5°	269.8	276.2	336.3	432.0	537.7	709.6	2239.5	5068.7	5828.8	5977.9	4299.3
75°	211.9	216.7	243.6	329.6	423.4	435.7	1201.8	3800.0	4787.3	5071.3	3579.2
77.5°	172.6	176.0	189.8	244.8	326.6	308.7	630.4	2473.4	2999.2	3285.1	2108.3
80°	137.1	140.9	149.1	165.9	244.8	220.1	300.8	1253.3	1448.8	1445.8	841.5
82.5°	106.5	107.6	117.3	121.8	167.4	156.2	162.9	530.6	587.8	607.2	303.8
85°	67.3	70.6	103.9	93.4	100.1	91.6	80.3	210.8	259.7	256.0	121.4
87.5°	20.6	21.7	35.1	39.6	44.5	40.0	29.5	62.0	75.9	82.2	30.3
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°	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4	834.4
2.5°	839.3	835.2	820.6	808.7	797.4	785.1	774.7	771.7	769.0	767.9	767.6
5°	847.1	834.8	806.0	782.5	763.8	746.6	735.8	730.9	726.1	726.1	727.6
7.5°	858.4	835.9	791.5	756.3	732.8	716.7	708.9	708.1	709.3	710.4	710.8
10°	870.7	835.2	770.2	726.4	705.5	698.0	698.4	704.8	710.8	715.2	716.0
12.5°	882.6	830.7	745.1	698.4	685.0	686.5	696.9	711.1	722.7	729.1	729.4
15°	896.1	823.6	714.9	671.9	667.4	679.0	698.4	720.1	737.7	748.1	749.2
17.5°	907.3	811.6	683.1	646.1	651.7	673.0	699.9	727.9	749.2	762.3	764.6
20°	920.0	796.3	650.2	621.4	637.5	666.3	696.9	727.2	749.2	761.9	764.9
22.5°	930.1	774.7	618.8	601.3	624.8	658.1	686.8	711.1	729.1	735.8	740.3
25°	934.2	747.4	589.3	584.8	614.7	644.6	664.0	677.9	683.5	682.7	684.6
27.5°	932.0	716.0	563.9	571.7	602.0	623.7	633.4	632.3	622.2	612.8	617.3
30°	922.6	678.6	542.6	558.3	585.6	597.5	596.0	581.5	562.4	544.8	546.0
32.5°	905.8	638.3	522.8	543.0	562.4	567.6	557.5	538.5	511.2	488.4	485.0
35°	891.6	599.8	505.2	525.4	539.2	536.6	526.9	502.2	477.6	457.4	454.0
37.5°	889.4	566.9	488.4	505.6	513.4	509.7	497.8	476.8	467.9	452.5	450.7
40°	901.3	543.7	471.2	484.7	488.4	485.4	472.3	460.4	468.6	464.9	464.9
42.5°	933.8	531.4	455.9	463.7	466.7	469.0	459.6	449.5	459.6	442.4	436.8
45°	985.4	531.8	442.1	443.2	452.2	460.0	453.7	438.7	433.5	399.1	392.4
47.5°	1061.3	544.5	430.9	423.8	439.8	452.9	443.9	422.3	399.1	376.3	372.2
50°	1149.8	567.3	420.8	403.6	423.4	443.9	437.2	411.8	387.9	374.1	371.4
52.5°	1248.1	596.0	408.4	381.2	403.2	439.8	438.7	410.3	377.4	368.1	365.8
55°	1369.6	624.4	393.1	355.0	385.3	436.5	434.6	398.0	375.2	368.5	367.7
57.5°	1510.8	665.5	371.1	328.5	364.7	422.6	418.5	390.5	367.7	362.9	362.5
60°	1738.4	729.4	339.7	304.2	343.8	398.4	403.6	377.8	355.8	354.6	354.3
62.5°	2037.7	819.1	307.2	279.1	319.5	367.0	381.9	360.6	343.0	348.6	349.4
65°	2451.0	894.6	273.5	257.8	292.6	336.7	361.4	344.5	328.8	339.7	339.7
67.5°	2720.4	896.1	242.9	235.8	265.3	311.3	339.7	325.5	310.5	328.8	329.6
70°	2664.4	785.1	217.5	212.6	238.8	284.0	315.8	304.6	287.4	303.8	297.8
71°	2574.0	723.5	207.4	203.7	228.3	270.9	304.6	295.2	278.0	288.9	285.5
72.5°	2429.7	628.2	191.0	191.7	212.6	254.5	288.9	279.1	262.0	267.9	266.8
75°	2053.8	548.6	163.3	166.7	182.7	226.5	257.5	250.0	232.4	232.4	231.3
77.5°	1284.0	383.4	135.6	137.5	155.1	193.9	221.2	214.9	198.1	192.4	191.0
80°	479.1	198.1	106.1	108.4	119.2	152.8	183.1	177.1	159.9	153.6	147.6
82.5°	181.2	99.4	78.1	76.2	87.8	116.6	143.5	136.4	122.9	107.6	103.1
85°	68.4	49.3	47.8	46.3	51.6	69.1	88.9	87.4	73.2	62.4	61.3
87.5°	17.9	16.1	18.7	13.8	14.6	13.1	13.5	5.6	2.6	1.1	0.7
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)