

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: P451288

Luminaire Tested: **GALN-SA2A-827-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451288
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
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-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4868 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

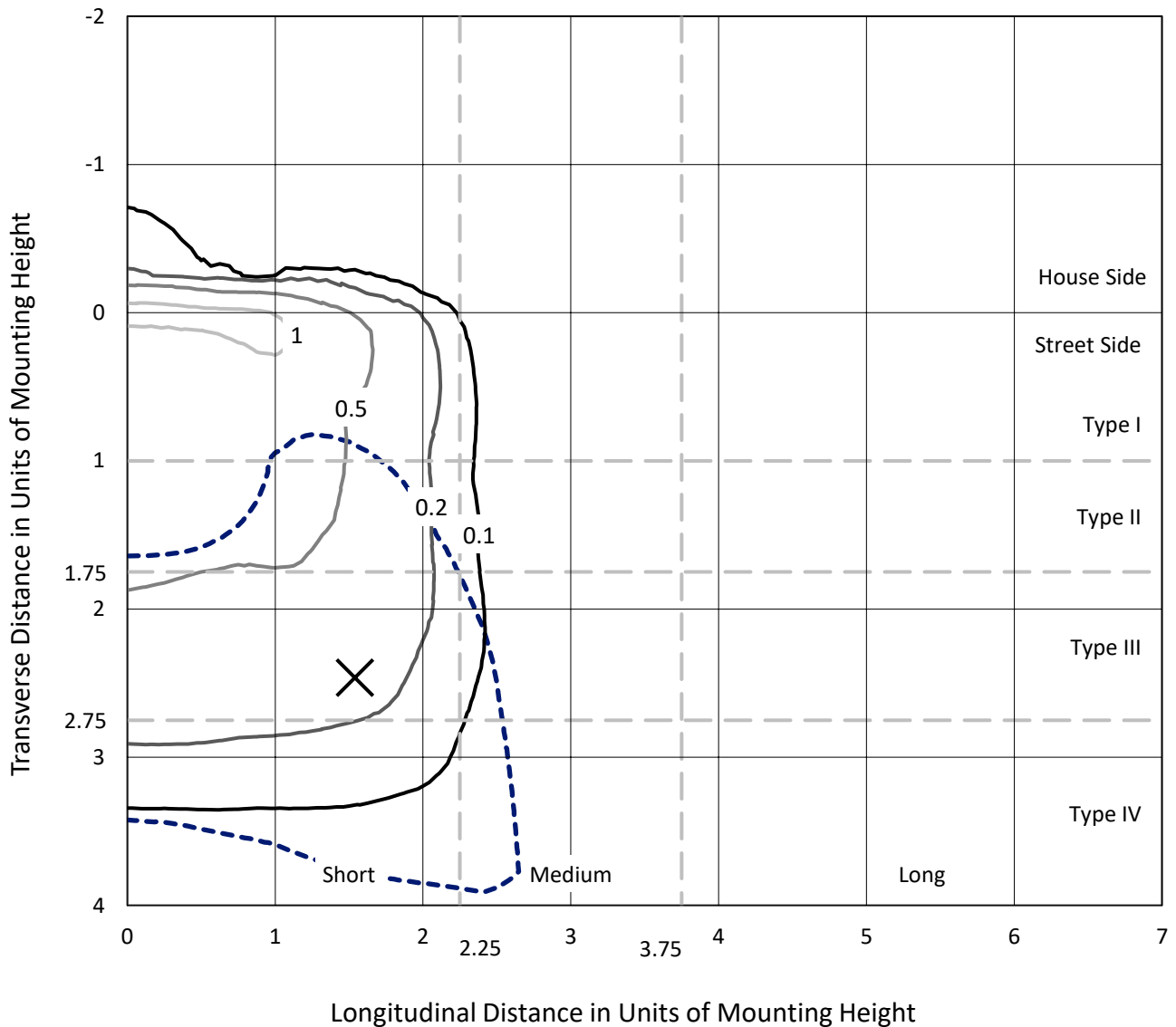
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

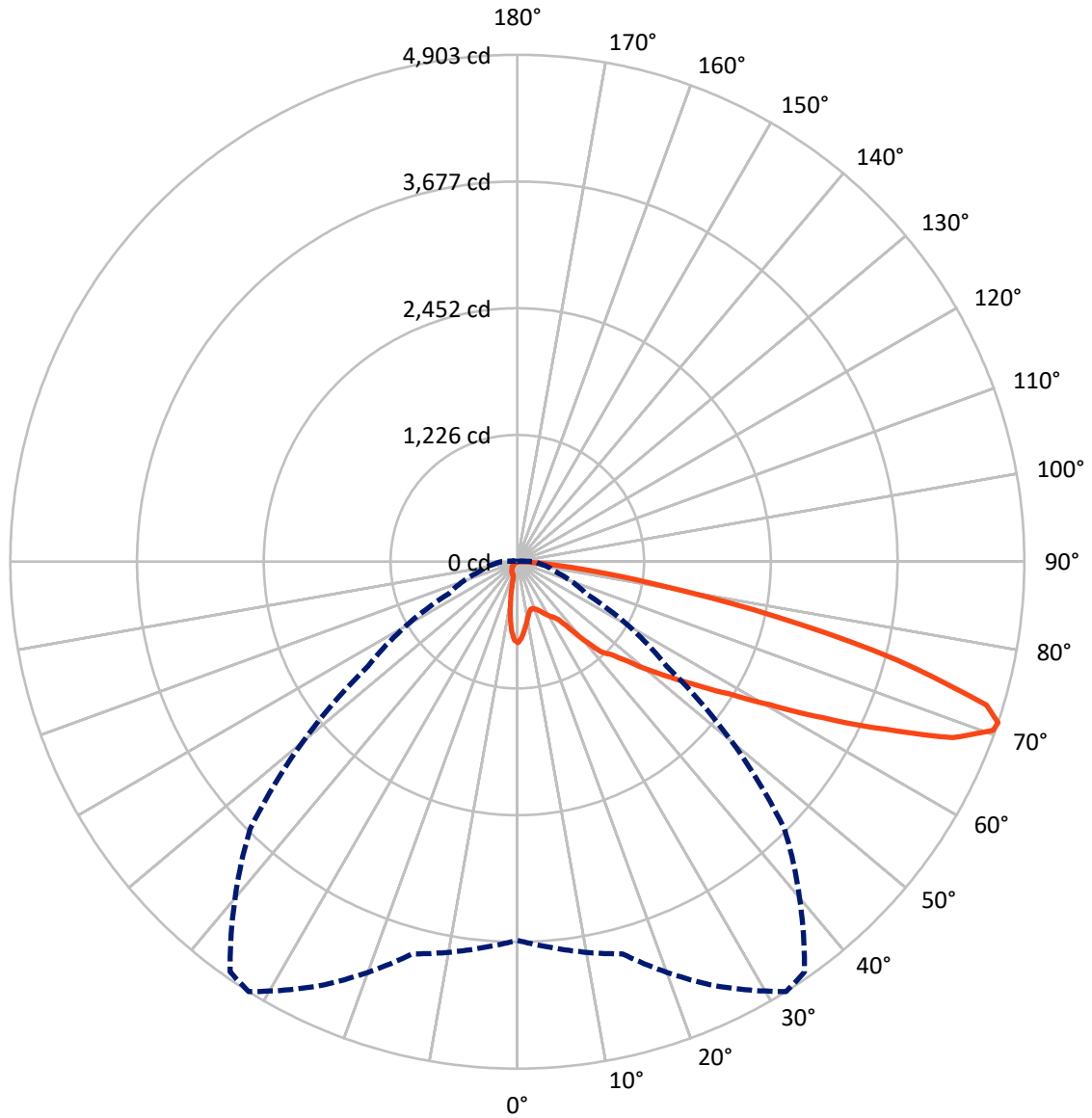
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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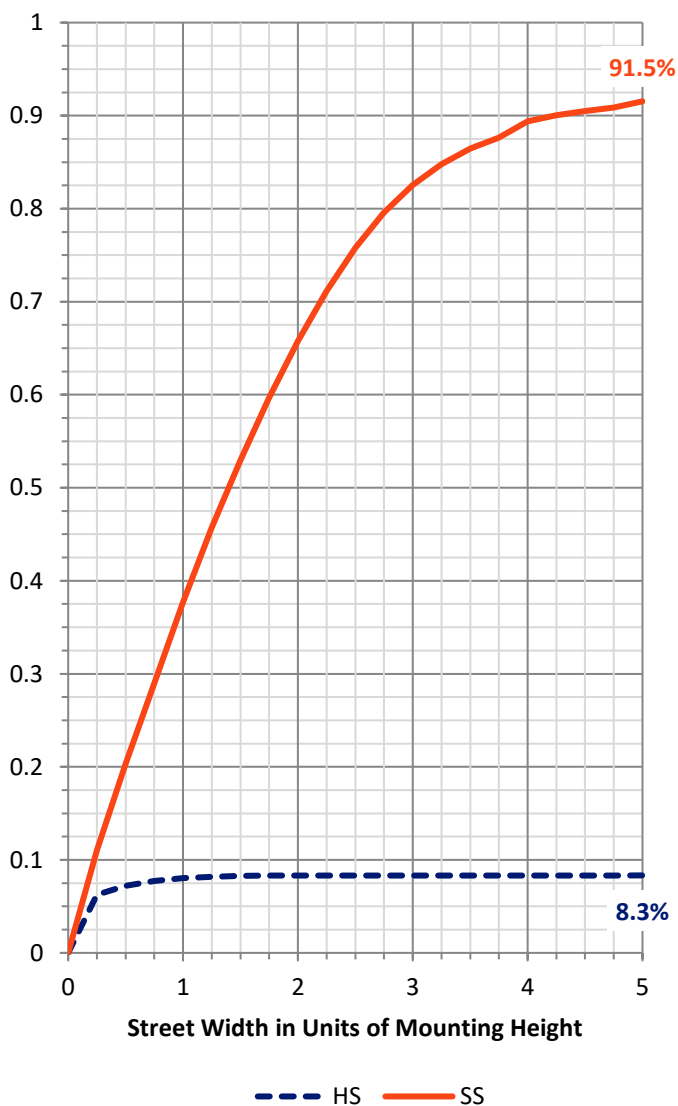
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	407.7	0.0	407.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	4460.2	0.0	4460.2
	% Fixture	91.6	0.0	91.6
Total	Lumens	4868.0	0.0	4868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	1.3
10°-20°	138.2	2.8
20°-30°	214.9	4.4
30°-40°	358.1	7.4
40°-50°	666.1	13.7
50°-60°	1069.4	22.0
60°-70°	1438.4	29.5
70°-80°	853.4	17.5
80°-90°	66.0	1.4
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°	4868.0	100.0
0°-180°	4868.0	100.0

Coefficient of Utilization



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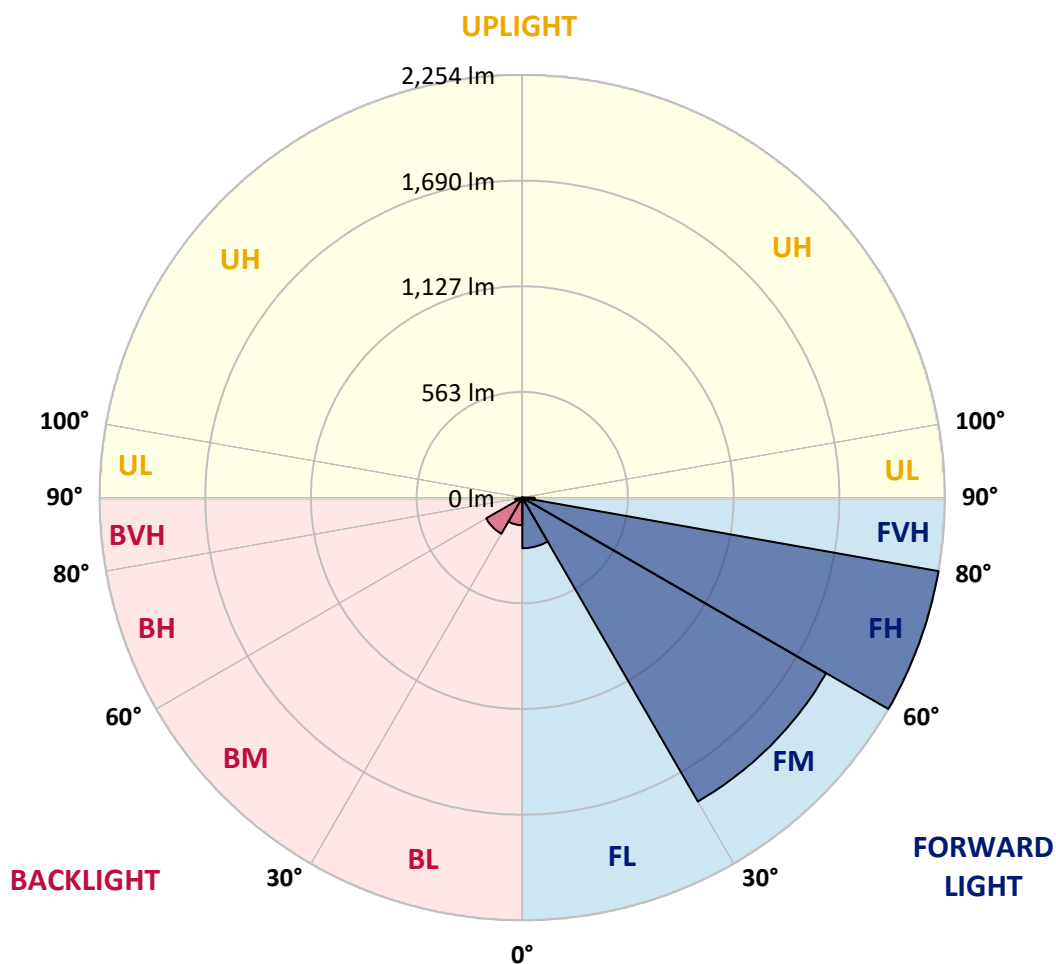
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.8	5.5			
FM	(30°-60°)	1871.1	38.4			
FH	(60°-80°)	2253.6	46.3			G2/5000
FVH	(80°-90°)	65.7	1.3			G1/100
BL	(0°-30°)	146.9	3.0	B1/500		
BM	(30°-60°)	222.4	4.6	B1/1000		
BH	(60°-80°)	38.1	0.8	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9
2.5°	726.1	733.5	732.4	735.0	741.4	744.0	751.1	758.9	769.8	777.2	782.1
5°	650.2	655.8	656.5	669.6	676.0	683.1	704.0	726.8	752.2	772.4	785.8
7.5°	569.1	572.1	578.1	595.3	611.3	618.4	650.2	689.8	729.8	767.5	791.8
10°	502.2	505.6	516.4	534.7	549.7	559.0	603.1	652.8	708.9	764.9	800.4
12.5°	464.1	466.0	470.1	486.5	505.6	515.7	563.1	619.9	692.0	766.0	815.0
15°	461.5	460.7	455.9	462.6	479.8	490.3	536.6	597.5	677.1	769.8	832.2
17.5°	475.3	473.4	461.9	461.9	476.1	484.7	525.4	585.5	669.6	778.4	856.5
20°	496.6	493.6	474.6	473.1	486.9	495.9	532.1	586.3	671.1	794.4	889.0
22.5°	523.5	520.2	491.4	492.1	507.1	516.0	551.5	599.7	680.5	814.2	923.7
25°	558.6	554.9	520.9	519.4	535.1	543.0	580.3	623.7	693.5	838.9	969.3
27.5°	605.4	597.5	556.8	554.5	571.4	581.4	615.1	655.8	716.7	872.9	1030.6
30°	643.8	635.2	596.4	590.4	608.3	616.2	650.9	699.1	762.3	932.3	1115.4
32.5°	694.3	681.6	636.0	620.3	639.4	649.4	702.9	779.9	829.9	995.1	1216.3
35°	807.9	800.0	744.4	689.4	688.3	701.0	779.5	861.3	899.4	1093.0	1353.8
37.5°	970.4	964.8	905.8	832.2	810.9	804.9	872.5	951.0	1010.4	1227.5	1513.8
40°	1159.1	1146.1	1091.9	1029.5	1001.8	984.3	982.4	1084.4	1155.4	1410.3	1680.4
42.5°	1294.4	1270.5	1204.7	1200.2	1194.3	1176.0	1122.9	1279.5	1342.6	1606.8	1858.7
45°	1436.4	1400.2	1302.3	1285.4	1283.2	1282.1	1335.1	1510.4	1546.6	1819.8	2041.8
47.5°	1546.6	1517.9	1437.5	1430.1	1439.4	1464.8	1615.8	1755.5	1748.1	2009.6	2195.3
50°	1693.5	1671.8	1582.5	1596.7	1644.9	1686.4	1932.3	2022.7	1913.6	2159.1	2307.1
52.5°	1866.9	1826.9	1743.9	1782.4	1856.4	1925.6	2268.2	2256.6	2029.8	2271.6	2390.4
55°	2017.1	1988.7	1960.3	2000.3	2110.9	2197.2	2571.6	2431.9	2114.3	2362.0	2427.0
57.5°	2271.2	2264.5	2235.3	2276.1	2410.2	2499.9	2843.3	2567.9	2168.4	2409.1	2384.1
60°	2647.1	2636.3	2582.1	2634.0	2808.9	2949.8	3093.7	2690.1	2180.8	2390.8	2260.4
62.5°	3099.3	3062.3	3015.9	3092.5	3332.4	3394.5	3329.4	2762.6	2134.8	2245.0	1962.2
65°	3521.5	3483.4	3484.5	3646.0	3907.2	3949.4	3604.5	2751.7	2000.3	1880.0	1447.2
67.5°	3844.7	3838.4	3884.0	4199.0	4540.5	4511.4	3850.4	2589.6	1601.6	1218.6	769.0
70°	3861.2	3873.5	4004.3	4536.0	4882.8	4836.5	3829.4	2104.9	998.5	560.5	303.1
71°	3662.4	3745.4	3926.2	4525.6	4903.0	4842.8	3653.1	1763.0	732.4	390.9	218.6
72.5°	3120.9	3164.7	3555.5	4259.2	4743.4	4614.9	3205.8	1235.7	469.0	239.2	125.6
75°	1718.9	1826.5	2381.1	3341.4	3793.9	3681.1	2089.2	587.0	233.9	130.8	51.9
77.5°	818.3	797.4	1161.8	1987.2	2572.4	2566.4	1052.6	260.8	136.4	88.6	26.2
80°	233.9	263.1	444.7	944.7	1428.2	1443.9	404.3	125.9	94.5	69.1	13.5
82.5°	70.6	72.1	163.3	417.8	710.4	669.6	151.7	64.3	68.0	54.9	7.8
85°	12.3	15.3	48.2	147.2	270.9	205.5	38.1	30.6	44.8	36.2	4.5
87.5°	0.7	1.1	16.1	16.8	23.9	13.8	6.7	4.5	9.7	9.7	2.6
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°	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9	782.9
2.5°	785.5	787.7	786.2	782.9	777.2	770.5	761.6	754.1	747.7	744.4	748.5
5°	790.3	793.3	785.8	769.0	743.6	716.0	684.6	660.3	641.2	635.2	633.0
7.5°	797.8	799.7	779.5	742.1	688.3	622.9	565.7	517.5	480.2	469.0	452.5
10°	807.5	806.4	768.3	698.8	604.2	506.0	417.4	351.6	301.9	284.0	282.5
12.5°	822.5	816.5	754.1	639.7	504.1	375.5	266.1	208.1	176.7	166.3	164.0
15°	841.1	826.9	731.7	570.6	386.0	242.5	164.0	146.5	142.4	141.6	140.9
17.5°	863.2	840.8	702.1	485.8	271.3	157.3	137.1	136.8	137.1	136.4	136.0
20°	893.1	855.3	667.0	385.3	179.4	132.7	130.8	130.8	131.2	130.8	130.8
22.5°	924.8	872.5	623.7	294.1	135.3	125.9	125.6	126.3	127.0	126.7	126.7
25°	964.1	895.0	566.5	201.4	121.1	120.3	120.7	122.2	123.7	124.1	123.7
27.5°	1020.9	922.6	505.2	138.6	111.0	111.7	115.5	119.2	121.4	121.8	121.8
30°	1084.8	953.2	425.2	112.5	102.8	102.8	107.2	114.3	119.2	119.9	120.3
32.5°	1167.0	988.7	336.7	101.3	94.9	94.2	98.3	106.9	115.8	118.5	118.5
35°	1268.6	1030.6	250.4	94.2	89.3	87.4	89.7	96.8	108.4	115.8	116.6
37.5°	1387.8	1070.2	183.1	87.8	84.1	81.5	83.0	88.6	97.9	109.1	112.1
40°	1498.1	1105.3	136.8	82.6	78.8	77.0	78.1	80.7	88.6	99.0	100.9
42.5°	1618.4	1132.6	108.7	77.0	73.6	72.9	72.9	74.0	79.2	85.2	85.6
45°	1738.3	1142.3	91.2	70.3	68.0	68.8	68.4	67.6	69.9	69.1	69.1
47.5°	1823.9	1130.7	75.5	63.9	63.9	65.0	63.2	60.5	59.4	54.9	55.3
50°	1882.6	1088.5	62.0	56.4	59.4	60.9	57.2	53.1	49.0	44.1	43.0
52.5°	1906.9	1013.4	50.8	46.7	52.7	54.6	50.1	45.2	38.9	34.8	33.6
55°	1891.2	920.7	42.2	38.1	44.5	46.7	42.2	36.6	29.5	25.0	24.3
57.5°	1822.0	810.1	35.9	30.3	35.5	37.0	34.0	28.0	20.9	16.4	16.4
60°	1702.5	695.8	29.1	23.9	26.5	28.8	25.8	20.2	14.2	10.1	9.3
62.5°	1460.0	565.0	23.5	18.7	18.7	20.6	17.9	14.6	9.0	5.2	4.9
65°	1054.1	387.5	18.7	13.8	13.5	13.5	11.2	9.7	5.2	2.2	1.5
67.5°	572.8	218.6	14.9	10.5	9.3	9.0	7.1	5.6	2.2	0.4	0.0
70°	225.3	84.1	11.6	7.1	6.0	5.6	3.7	2.6	1.5	0.0	0.0
71°	152.8	57.9	10.1	6.0	4.9	4.1	3.0	2.2	1.1	0.0	0.0
72.5°	87.4	35.9	7.8	4.5	3.7	3.0	2.2	1.5	1.1	0.0	0.0
75°	38.1	18.3	4.9	3.4	2.6	1.9	1.5	1.1	0.4	0.0	0.0
77.5°	19.4	10.1	3.4	2.6	1.5	1.1	0.7	0.4	0.0	0.0	0.0
80°	10.8	5.2	2.2	1.5	1.1	0.7	0.4	0.4	0.0	0.0	0.0
82.5°	6.0	3.0	1.1	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	1.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.7	0.0	0.0	0.0	0.0	0.4	0.4	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)