

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: P451273

Luminaire Tested: **GALN-SA2A-827-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451273
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
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-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5561 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

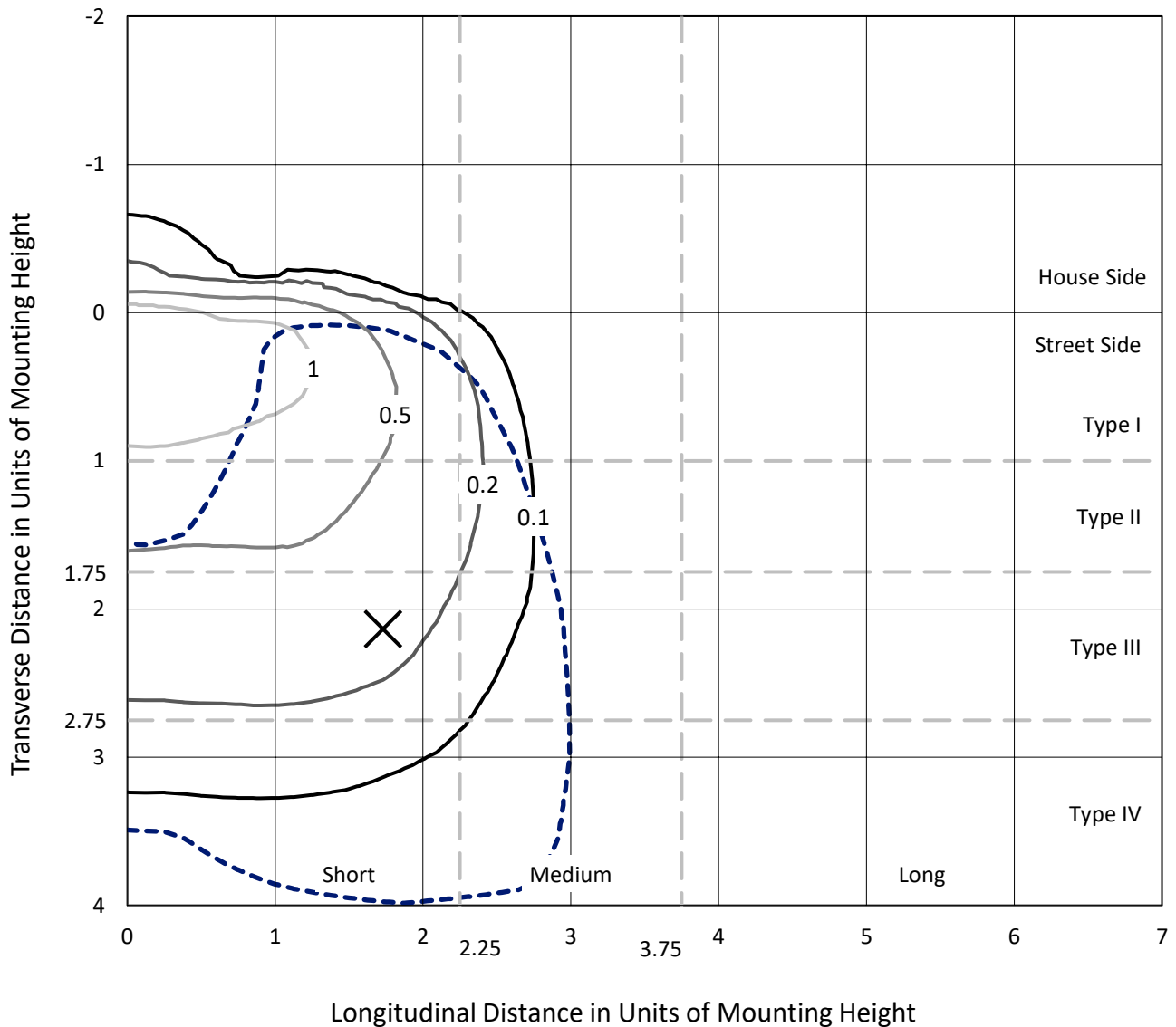
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P451273
 CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

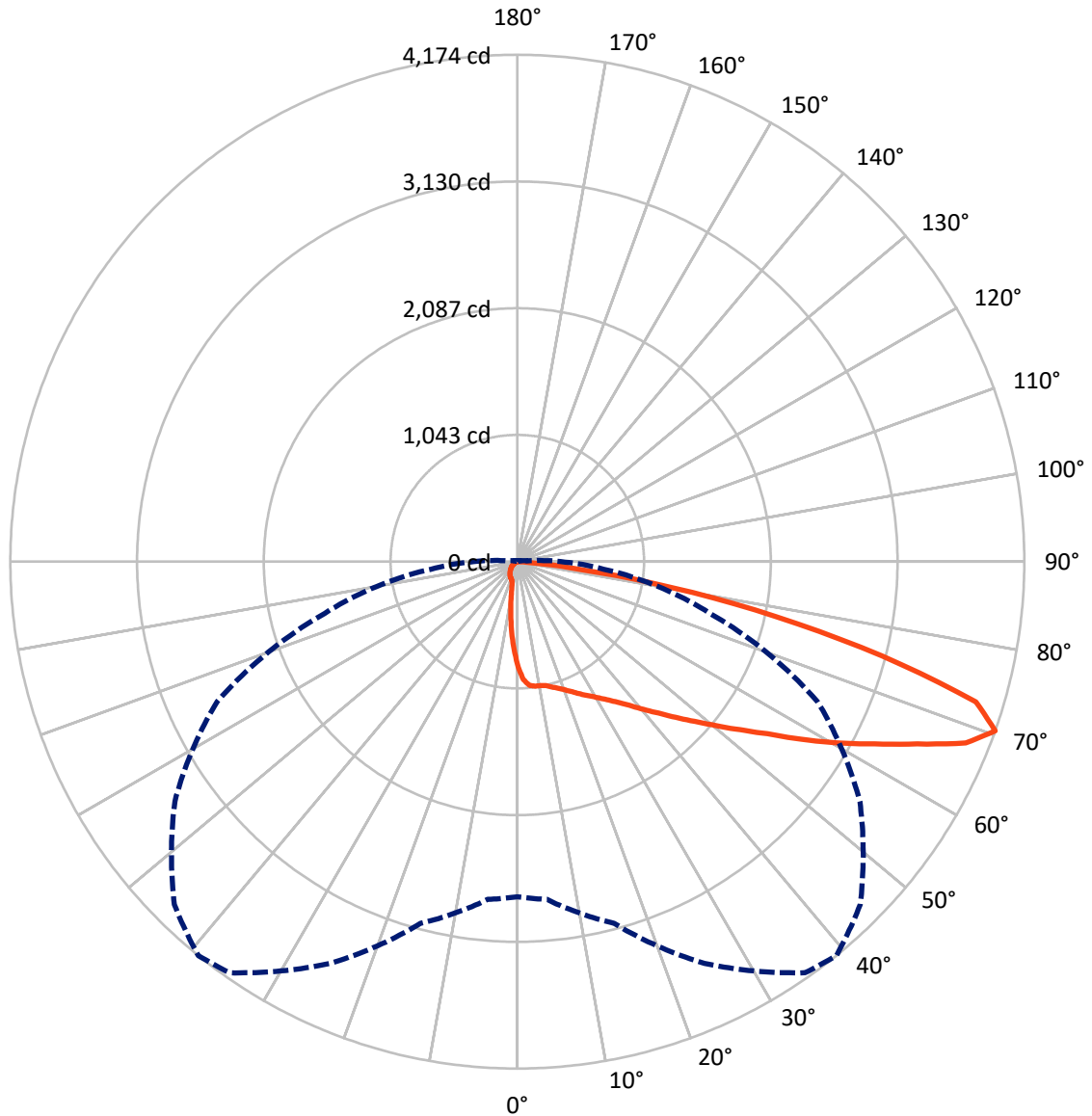
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P451273
CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P451273
 CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

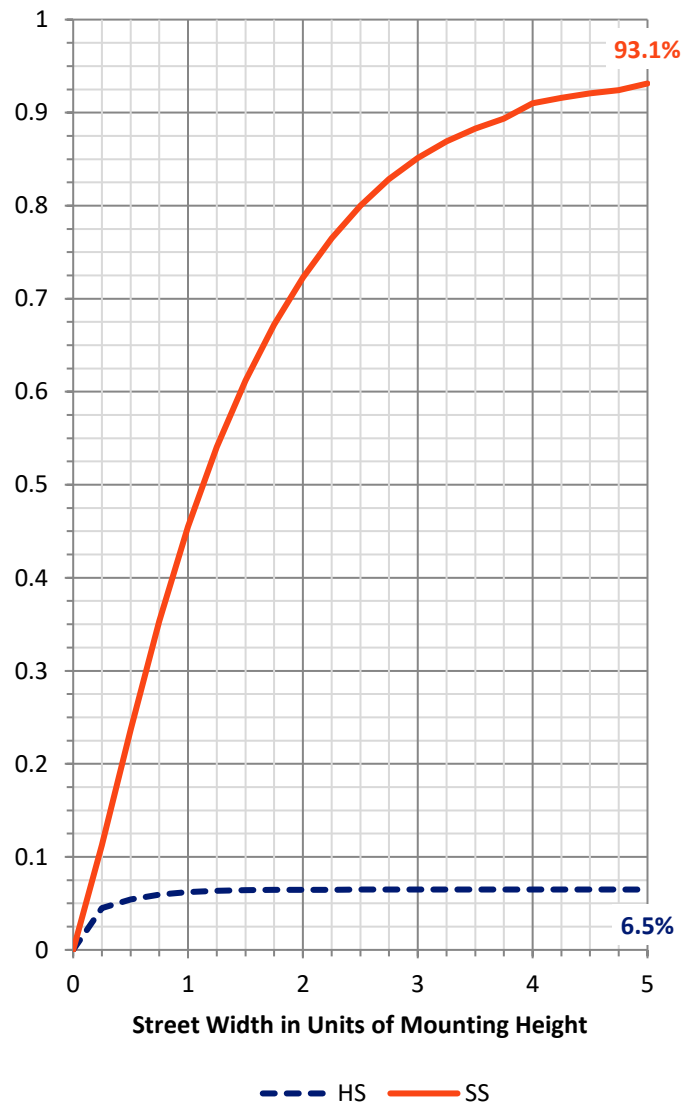
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.6	0.0	362.6
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	5198.4	0.0	5198.4
	% Fixture	93.5	0.0	93.5
Total	Lumens	5561.0	0.0	5561.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	1.3
10°-20°	192.3	3.5
20°-30°	322.2	5.8
30°-40°	499.7	9.0
40°-50°	791.9	14.2
50°-60°	1160.8	20.9
60°-70°	1487.8	26.8
70°-80°	934.9	16.8
80°-90°	97.4	1.8
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°	5561.0	100.0
0°-180°	5561.0	100.0



REPORT NUMBER: P451273

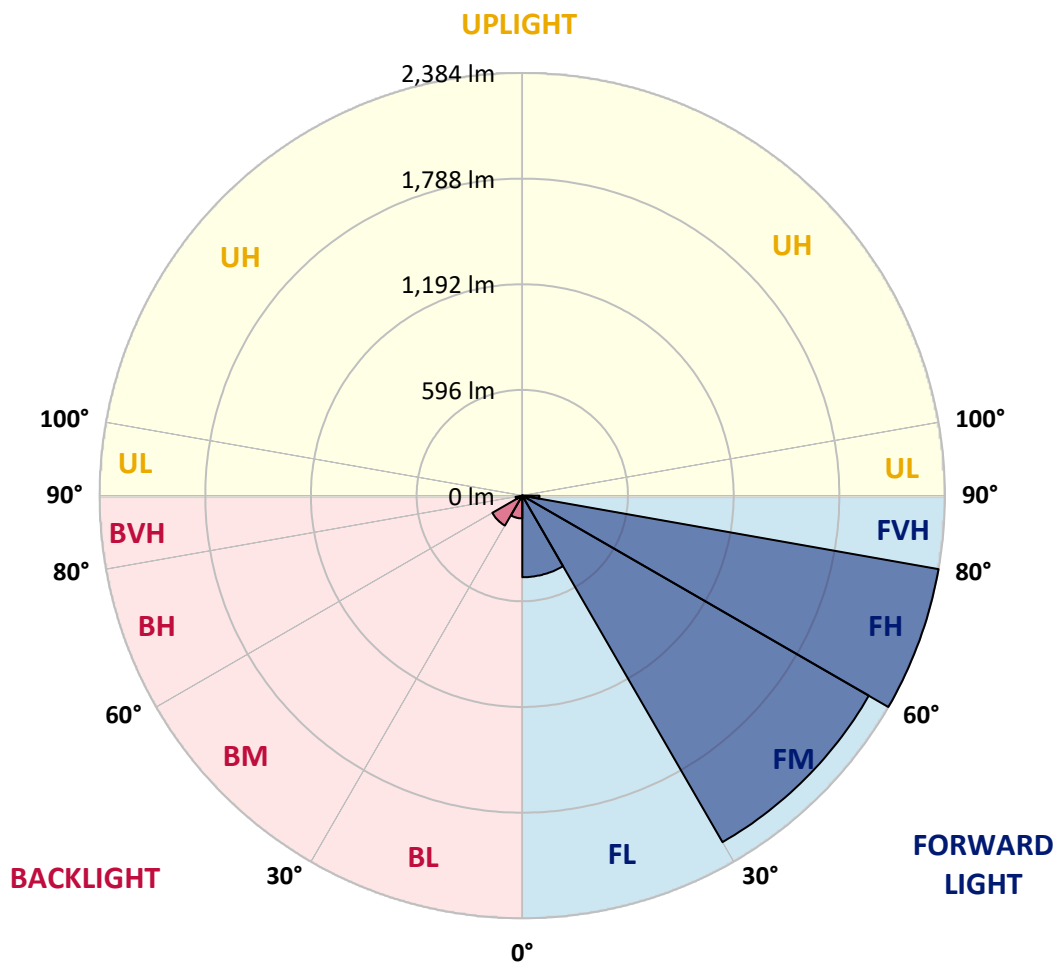
CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.1	8.3			
FM (30°-60°)	2257.2	40.6			
FH (60°-80°)	2384.4	42.9			G2/5000
FVH (80°-90°)	96.7	1.7			G1/100
BL (0°-30°)	128.4	2.3	B1/500		
BM (30°-60°)	195.1	3.5	B0/220		
BH (60°-80°)	38.3	0.7	B0/110		G0/110
BVH (80°-90°)	0.7	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





REPORT NUMBER: P451273

CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7
2.5°	1002.6	999.2	994.8	989.5	974.6	972.0	963.0	943.9	921.1	902.5	876.7
5°	1050.1	1051.9	1048.6	1039.2	1028.4	1022.0	1010.8	981.3	951.8	914.0	871.8
7.5°	1060.9	1064.6	1060.5	1051.6	1041.1	1034.4	1025.4	1000.0	965.6	922.6	864.7
10°	1059.8	1064.3	1061.7	1053.4	1044.8	1038.5	1028.8	1008.6	980.9	935.7	867.0
12.5°	1057.9	1063.9	1063.5	1059.4	1052.3	1047.5	1041.5	1023.5	997.8	954.8	879.3
15°	1052.7	1060.2	1066.9	1070.2	1070.6	1070.6	1063.1	1044.1	1019.4	979.8	895.4
17.5°	1054.9	1063.5	1080.3	1090.1	1096.8	1096.0	1088.2	1067.6	1040.4	1005.6	912.2
20°	1068.8	1080.3	1103.9	1123.3	1130.0	1127.8	1117.3	1093.4	1062.4	1027.6	928.6
22.5°	1102.8	1113.2	1142.7	1165.5	1170.4	1164.4	1149.5	1117.0	1088.9	1051.6	948.4
25°	1153.6	1165.9	1193.2	1210.4	1210.4	1207.0	1186.1	1148.0	1118.8	1084.8	974.2
27.5°	1215.2	1225.7	1252.6	1267.9	1259.0	1249.2	1228.3	1182.4	1154.3	1126.7	1005.2
30°	1277.6	1284.4	1312.8	1319.5	1310.2	1297.8	1275.4	1229.4	1204.8	1183.5	1050.1
32.5°	1336.7	1351.3	1374.8	1373.3	1360.6	1354.6	1334.1	1285.1	1271.3	1269.0	1112.8
35°	1395.7	1406.9	1427.9	1433.1	1421.9	1420.8	1405.8	1369.6	1369.9	1384.5	1210.8
37.5°	1446.6	1456.6	1481.3	1492.9	1495.1	1500.7	1494.8	1470.8	1504.8	1544.8	1340.4
40°	1489.2	1503.4	1534.7	1554.9	1578.1	1598.6	1599.8	1605.0	1673.4	1742.1	1509.7
42.5°	1522.4	1542.2	1587.8	1625.2	1678.2	1704.4	1725.3	1754.1	1869.2	1972.0	1709.3
45°	1565.8	1588.6	1645.4	1704.0	1787.0	1830.0	1859.1	1936.1	2099.4	2239.5	1914.0
47.5°	1637.5	1649.5	1707.4	1793.0	1902.1	1963.4	2020.2	2136.8	2346.4	2472.0	2084.4
50°	1729.8	1737.7	1781.4	1900.2	2041.5	2122.2	2225.7	2362.8	2602.7	2664.8	2180.9
52.5°	1831.8	1834.4	1867.3	2018.3	2197.7	2299.3	2415.2	2584.4	2811.6	2802.3	2244.8
55°	1950.3	1946.5	1974.6	2146.5	2382.6	2498.9	2633.8	2811.3	2992.9	2899.8	2281.4
57.5°	2085.9	2075.8	2103.1	2316.5	2619.6	2758.6	2895.7	3007.1	3133.4	2981.7	2298.9
60°	2227.9	2207.8	2240.3	2507.5	2898.7	3030.6	3144.6	3174.5	3281.4	3046.7	2268.7
62.5°	2341.2	2341.5	2402.1	2710.7	3185.7	3301.2	3361.7	3388.6	3408.8	3032.5	2109.5
65°	2517.9	2523.9	2620.7	2992.9	3517.9	3618.1	3659.5	3572.1	3414.4	2856.1	1870.3
67.5°	2700.3	2719.3	2896.5	3381.5	3901.7	3982.4	3929.0	3607.6	3261.9	2453.6	1418.2
70°	2759.7	2791.1	3082.9	3649.1	4131.9	4173.7	3992.9	3442.1	2726.8	1640.5	713.7
72.5°	2528.8	2579.6	2975.7	3551.5	3985.0	3948.8	3572.5	2886.8	1733.5	622.9	217.9
75°	1783.2	1805.7	2473.1	2946.2	3205.1	3102.4	2717.5	1861.0	713.0	174.9	74.7
77.5°	920.8	909.9	1470.8	1954.8	2285.9	2179.4	1779.5	963.4	270.2	72.9	46.3
80°	476.1	483.9	636.4	1024.3	1395.4	1284.0	948.8	446.6	143.9	40.4	35.5
82.5°	266.8	250.4	365.8	447.3	652.5	511.6	364.0	316.1	62.8	24.3	33.6
85°	48.6	50.8	200.7	241.8	226.5	143.9	117.3	211.1	18.3	13.5	23.5
87.5°	0.7	0.7	38.9	69.5	44.1	20.2	37.0	30.3	3.7	5.2	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P451273
 CATALOG NUMBER: GALN-SA2A-827-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7	867.7
2.5°	863.6	849.4	822.9	796.7	763.4	736.2	717.9	698.8	679.4	680.9	685.3
5°	848.6	824.0	771.7	716.4	663.3	615.5	568.4	526.2	509.0	493.3	494.0
7.5°	833.7	798.9	722.3	635.6	555.3	473.8	414.8	366.2	340.4	321.0	315.4
10°	827.0	781.0	677.1	557.9	443.9	355.0	279.1	239.5	208.9	199.2	201.8
12.5°	830.0	772.0	636.4	487.7	352.0	247.4	194.3	174.1	167.4	166.3	165.5
15°	835.6	765.7	596.4	409.9	258.6	183.9	163.3	159.6	158.8	158.1	158.4
17.5°	843.0	760.1	553.8	337.1	198.4	160.7	154.7	152.8	152.5	152.5	152.5
20°	850.5	753.7	506.3	272.0	165.5	151.7	148.0	146.9	146.5	146.5	146.1
22.5°	859.1	748.1	458.1	213.8	152.5	145.4	142.0	141.3	140.9	140.5	140.5
25°	871.4	741.0	406.9	174.9	144.2	139.4	136.0	135.3	134.9	133.4	133.8
27.5°	887.9	735.8	354.3	151.0	136.8	131.9	129.7	128.5	127.8	126.7	127.1
30°	910.3	731.3	298.2	137.9	128.2	124.1	121.8	121.1	120.3	119.2	119.2
32.5°	949.2	733.2	239.2	127.4	120.3	115.5	113.2	112.5	111.7	110.6	110.6
35°	1007.5	744.0	191.3	118.5	111.0	106.1	103.9	103.9	102.8	101.3	100.9
37.5°	1102.8	771.7	153.6	109.9	102.0	97.5	94.9	94.2	93.0	90.8	90.4
40°	1215.2	814.6	129.3	101.3	93.8	89.3	87.1	84.8	81.8	79.6	79.2
42.5°	1356.5	858.7	112.1	92.7	85.9	81.8	79.2	75.5	71.0	68.0	67.6
45°	1503.7	899.1	100.5	84.8	78.5	75.1	72.1	66.1	60.5	56.8	56.4
47.5°	1613.6	906.6	91.2	77.4	72.1	68.8	64.6	57.2	49.7	46.3	45.2
50°	1665.5	870.3	81.5	69.9	65.8	62.0	56.8	48.2	40.0	35.9	35.1
52.5°	1683.8	807.5	73.6	63.2	59.4	54.9	48.6	38.9	31.4	27.3	26.9
55°	1676.4	728.3	66.5	56.8	51.9	46.7	40.4	31.0	23.2	19.8	19.1
57.5°	1637.1	627.4	59.4	50.4	44.5	39.2	32.1	23.2	15.7	12.7	12.3
60°	1531.4	489.9	52.3	43.3	37.7	32.1	25.4	16.4	9.7	7.1	7.1
62.5°	1352.8	363.6	45.6	36.2	31.8	25.8	17.9	10.5	5.2	3.7	3.4
65°	1130.4	268.3	38.1	30.6	26.5	20.2	12.7	6.4	2.6	1.1	0.7
67.5°	788.9	165.5	31.8	25.0	21.7	14.6	7.8	2.6	1.1	0.0	0.0
70°	358.4	78.8	24.3	19.1	16.4	10.5	4.1	1.5	0.7	0.0	0.0
72.5°	111.4	41.5	17.2	13.8	11.2	6.7	2.2	1.1	0.7	0.0	0.0
75°	51.6	26.5	10.8	7.5	6.4	3.4	1.5	0.7	0.4	0.0	0.0
77.5°	38.5	20.6	6.4	4.1	3.4	2.2	1.1	0.7	0.4	0.0	0.0
80°	33.6	10.5	3.7	2.6	1.9	1.5	0.7	0.4	0.0	0.0	0.0
82.5°	30.3	5.2	2.2	1.5	1.1	0.7	0.4	0.4	0.0	0.0	0.0
85°	16.4	3.0	1.5	1.1	0.7	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	1.1	0.7	0.7	0.4	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)