

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638866

Luminaire Tested: GWS-SA4F-760-U-SLL-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-760-U-SLL-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20784.1 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

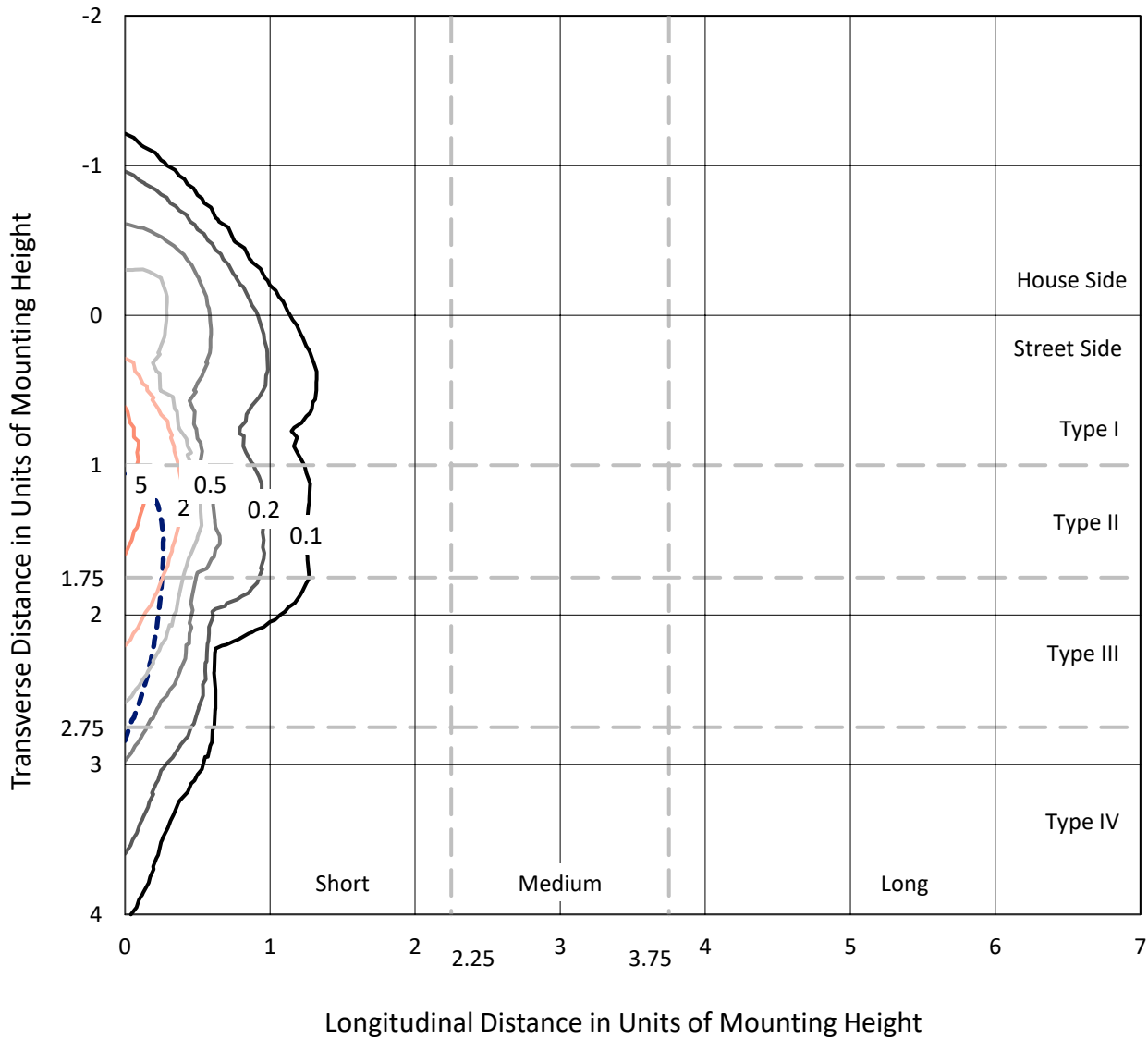
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

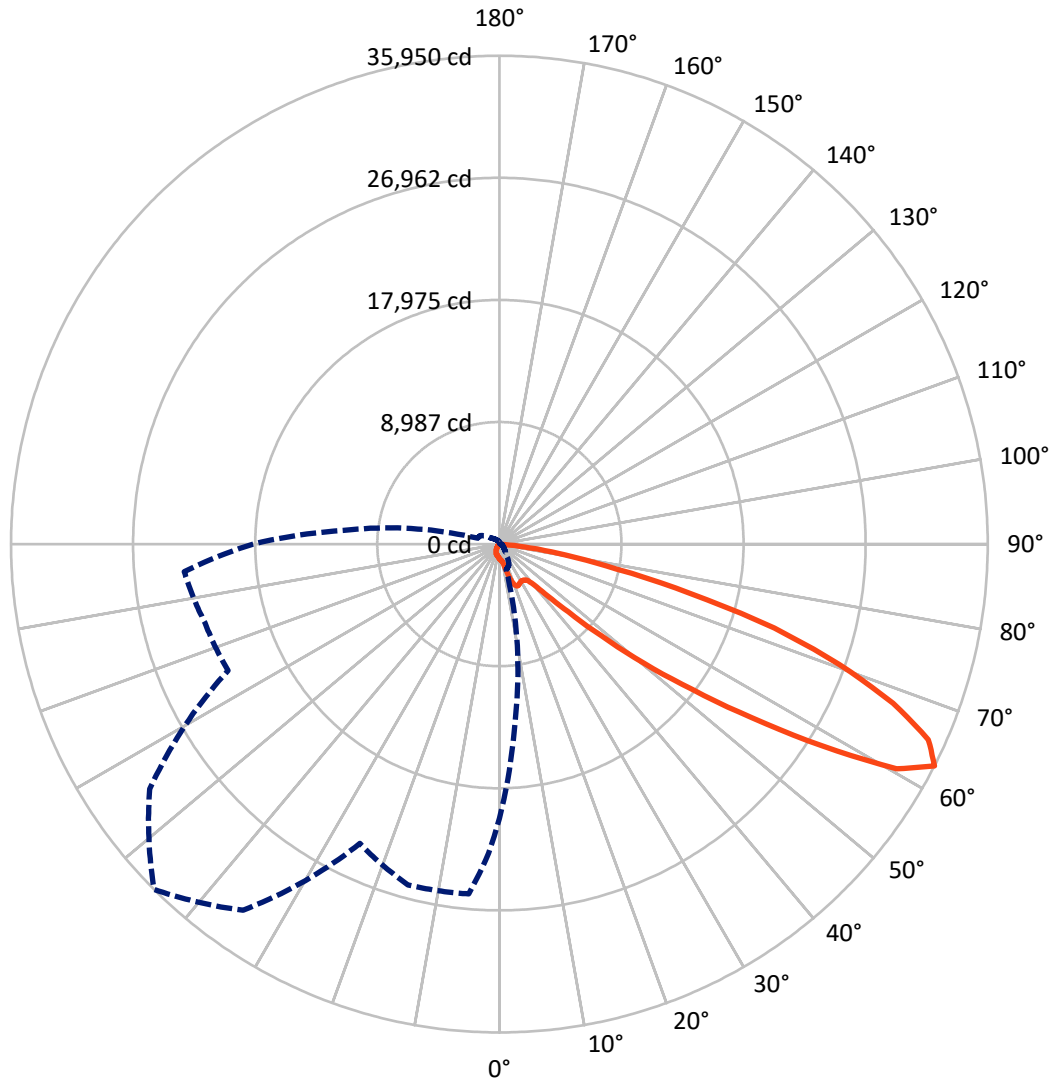
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2414.8	0.0	2414.8
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	18369.3	0.0	18369.3
	% Fixture	88.4	0.0	88.4
Total	Lumens	20784.1	0.0	20784.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	0.4
10°-20°	319.0	1.5
20°-30°	720.7	3.5
30°-40°	1241.6	6.0
40°-50°	2342.2	11.3
50°-60°	5229.5	25.2
60°-70°	6994.3	33.7
70°-80°	3507.5	16.9
80°-90°	336.2	1.6
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°	20784.1	100.0
0°-180°	20784.1	100.0

Coefficient of Utilization



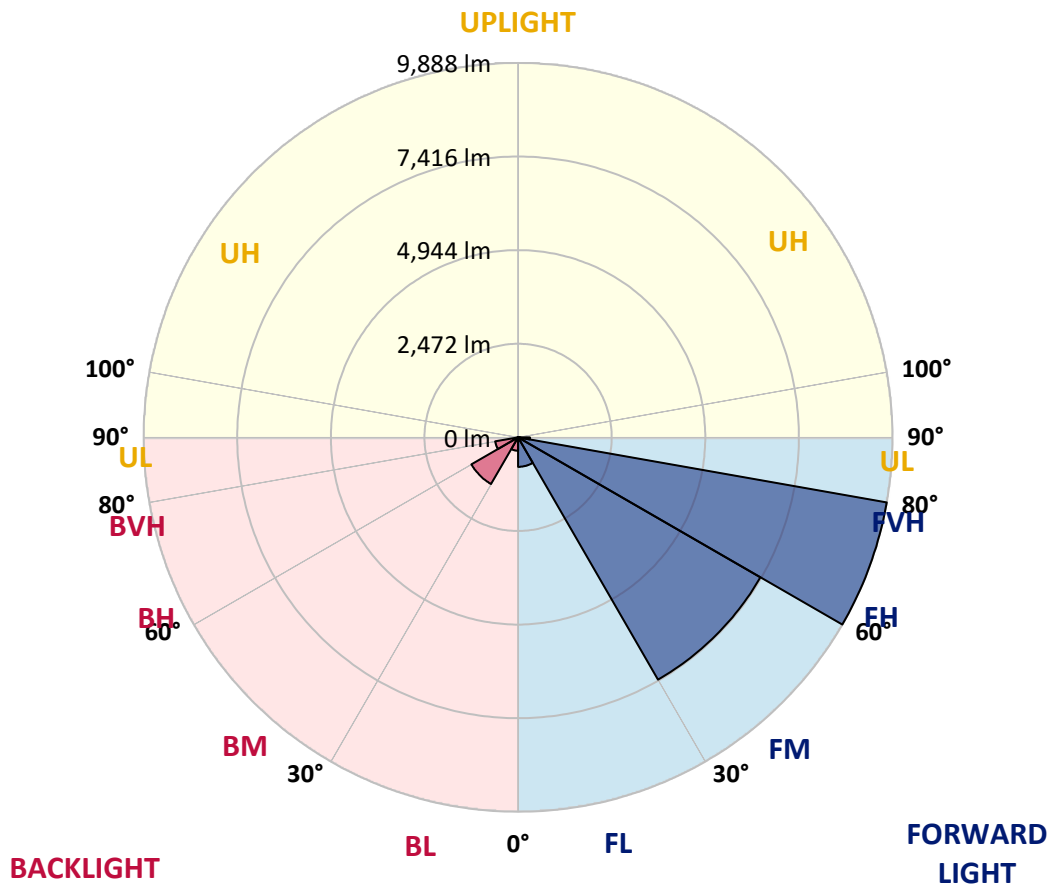
REPORT NUMBER: P638866

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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°)	778.4	3.7			
FM (30°-60°)	7389.4	35.6			
FH (60°-80°)	9887.7	47.6			G4/12000
FVH (80°-90°)	313.8	1.5			G3/500
BL (0°-30°)	354.5	1.7	B1/500		
BM (30°-60°)	1423.9	6.9	B2/2500		
BH (60°-80°)	614.1	3.0	B2/1000		G2/1000
BVH (80°-90°)	22.4	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0 </tr			

BUG Rating: B2-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9
2.5°	1065.6	1063.1	1058.2	1043.4	1031.1	1023.8	1009.0	1009.0	1006.5	1001.6	991.8
5°	1031.1	1021.3	1011.4	984.4	954.8	937.6	917.9	915.5	915.5	910.5	908.1
7.5°	977.0	967.2	954.8	910.5	883.5	866.3	849.0	846.6	839.2	839.2	839.2
10°	947.5	932.7	913.0	863.8	836.7	822.0	809.7	802.3	797.3	790.0	787.5
12.5°	1011.4	984.4	942.5	853.9	817.0	797.3	782.6	777.7	762.9	753.0	745.7
15°	1210.8	1144.3	1060.7	876.1	809.7	780.1	760.4	750.6	738.3	721.1	708.8
17.5°	1538.1	1442.1	1301.8	947.5	802.3	765.4	740.7	723.5	706.3	686.6	671.8
20°	1990.9	1848.2	1680.8	1077.9	802.3	748.1	718.6	696.4	671.8	649.7	632.5
22.5°	2566.8	2424.0	2138.6	1299.4	812.1	726.0	691.5	662.0	632.5	612.8	593.1
25°	3211.5	3009.7	2744.0	1567.6	839.2	696.4	659.5	630.0	602.9	578.3	556.2
27.5°	3930.1	3711.1	3356.7	1949.1	898.2	666.9	625.1	598.0	573.4	548.8	519.3
30°	4592.1	4461.7	4099.9	2406.8	994.2	647.2	598.0	573.4	548.8	516.8	489.7
32.5°	5387.0	5155.7	4857.9	2928.5	1122.2	627.5	575.9	541.4	521.7	492.2	462.7
35°	6186.8	5989.9	5598.6	3570.8	1264.9	607.9	548.8	516.8	499.6	465.1	433.1
37.5°	7011.2	6966.9	6580.6	4282.0	1405.2	585.7	516.8	497.1	479.9	440.5	403.6
40°	7823.3	7742.1	7385.3	5094.2	1491.3	561.1	489.7	477.4	457.7	413.4	371.6
42.5°	8601.0	8539.5	8192.5	5871.8	1479.0	538.9	462.7	447.9	433.1	388.8	337.1
45°	9555.8	9454.9	9016.9	6447.7	1353.5	563.6	435.6	411.0	408.5	366.7	302.7
47.5°	11342.5	11010.3	10267.1	6890.6	1228.0	627.5	406.1	376.5	393.8	344.5	268.2
50°	13845.3	13454.0	12378.5	7235.2	1225.5	711.2	401.1	344.5	381.4	327.3	238.7
52.5°	16360.4	15671.3	14364.5	7419.7	1316.6	772.7	445.4	312.5	366.7	310.1	216.6
55°	18769.6	17339.8	15196.3	6809.4	1388.0	839.2	526.6	295.3	339.6	290.4	204.3
57.5°	21065.7	18681.0	15558.1	5387.0	1626.7	866.3	575.9	302.7	300.2	265.8	194.4
60°	21380.7	18617.0	14827.2	3132.8	1794.0	819.5	556.2	337.1	263.3	236.3	177.2
62.5°	20189.6	17379.2	13161.1	1954.0	1666.1	802.3	494.6	383.9	238.7	209.2	155.0
65°	18380.8	15437.5	10973.3	1260.0	1262.5	890.9	433.1	376.5	223.9	184.6	132.9
67.5°	15553.2	12920.0	8645.3	844.1	713.7	760.4	379.0	258.4	219.0	157.5	103.4
70°	11352.3	9196.5	5628.2	563.6	425.7	607.9	317.5	184.6	206.7	130.4	73.8
72.5°	8298.3	6179.4	3142.6	369.1	241.2	354.4	233.8	132.9	160.0	96.0	51.7
75°	5972.7	4252.5	1794.0	236.3	160.0	194.4	152.6	91.1	103.4	76.3	46.8
77.5°	2874.4	2072.1	814.6	130.4	108.3	98.4	81.2	56.6	64.0	68.9	41.8
80°	108.3	81.2	61.5	64.0	68.9	44.3	36.9	29.5	36.9	46.8	22.1
82.5°	0.0	0.0	0.0	7.4	9.8	12.3	14.8	12.3	14.8	17.2	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9
2.5°	999.1	994.2	999.1	1004.1	1009.0	1013.9	1006.5	1011.4	1016.4	1004.1	1009.0
5°	920.4	917.9	932.7	940.1	949.9	954.8	949.9	949.9	947.5	932.7	932.7
7.5°	851.5	853.9	866.3	883.5	895.8	903.2	898.2	895.8	888.4	866.3	866.3
10°	799.8	799.8	819.5	834.3	851.5	858.9	853.9	846.6	839.2	817.0	814.6
12.5°	758.0	758.0	772.7	797.3	817.0	826.9	824.4	814.6	802.3	780.1	777.7
15°	718.6	716.1	738.3	760.4	787.5	799.8	794.9	787.5	765.4	745.7	740.7
17.5°	679.2	676.8	696.4	726.0	755.5	772.7	770.3	753.0	733.4	708.8	703.8
20°	639.8	634.9	659.5	689.1	718.6	735.8	730.9	716.1	691.5	666.9	662.0
22.5°	600.5	598.0	615.2	639.8	666.9	681.7	679.2	666.9	642.3	620.2	620.2
25°	556.2	556.2	568.5	585.7	605.4	612.8	615.2	610.3	595.5	583.2	583.2
27.5°	519.3	511.9	516.8	521.7	531.6	543.9	543.9	548.8	551.3	546.3	548.8
30°	489.7	477.4	470.0	460.2	455.3	460.2	465.1	482.3	499.6	509.4	514.3
32.5°	455.3	440.5	420.8	393.8	376.5	371.6	386.4	418.4	450.4	472.5	484.8
35°	420.8	401.1	364.2	324.8	302.7	295.3	312.5	349.5	396.2	435.6	452.8
37.5°	386.4	359.3	307.6	260.9	236.3	231.3	248.6	287.9	342.1	396.2	418.4
40°	347.0	315.0	253.5	204.3	184.6	179.6	194.4	233.8	290.4	351.9	386.4
42.5°	307.6	268.2	204.3	162.4	142.7	142.7	162.4	192.0	243.6	310.1	351.9
45°	268.2	226.4	167.3	130.4	118.1	120.6	132.9	162.4	204.3	273.2	312.5
47.5°	231.3	194.4	137.8	108.3	98.4	100.9	115.7	140.3	174.7	236.3	278.1
50°	199.3	164.9	120.6	91.1	83.7	88.6	103.4	125.5	155.0	209.2	243.6
52.5°	179.6	147.7	110.7	78.8	73.8	78.8	93.5	113.2	140.3	184.6	219.0
55°	169.8	145.2	110.7	71.4	64.0	68.9	83.7	103.4	125.5	167.3	196.9
57.5°	167.3	150.1	118.1	64.0	54.1	59.1	73.8	93.5	115.7	152.6	177.2
60°	157.5	142.7	115.7	51.7	41.8	49.2	61.5	81.2	105.8	142.7	164.9
62.5°	137.8	125.5	100.9	41.8	32.0	36.9	51.7	71.4	96.0	130.4	155.0
65°	113.2	100.9	78.8	27.1	19.7	24.6	39.4	61.5	83.7	118.1	140.3
67.5°	83.7	71.4	54.1	17.2	9.8	17.2	32.0	51.7	76.3	105.8	128.0
70°	51.7	41.8	29.5	9.8	7.4	14.8	29.5	49.2	68.9	98.4	120.6
72.5°	29.5	19.7	12.3	4.9	7.4	14.8	29.5	49.2	66.4	93.5	113.2
75°	22.1	12.3	4.9	2.5	4.9	12.3	27.1	44.3	64.0	88.6	108.3
77.5°	14.8	7.4	2.5	0.0	2.5	9.8	24.6	41.8	59.1	83.7	103.4
80°	2.5	0.0	0.0	0.0	0.0	7.4	22.1	36.9	54.1	73.8	91.1
82.5°	0.0	0.0	0.0	0.0	0.0	2.5	17.2	32.0	46.8	61.5	73.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	9.8	24.6	36.9	46.8	51.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	24.6	29.5	34.5
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9
2.5°	1006.5	1021.3	1021.3	1031.1	1043.4	1065.6	1077.9	1095.1	1107.4	1119.7	1124.7
5°	930.2	932.7	935.2	940.1	954.8	979.5	1001.6	1028.7	1060.7	1085.3	1100.0
7.5°	866.3	866.3	866.3	873.6	888.4	905.6	927.8	964.7	1001.6	1031.1	1055.7
10°	812.1	819.5	822.0	834.3	851.5	873.6	898.2	930.2	972.1	1011.4	1055.7
12.5°	777.7	785.0	797.3	809.7	826.9	851.5	878.6	920.4	1006.5	1087.7	1181.3
15°	745.7	755.5	770.3	787.5	807.2	834.3	863.8	949.9	1151.7	1304.3	1452.0
17.5°	711.2	726.0	745.7	762.9	787.5	817.0	853.9	1021.3	1417.5	1671.0	1922.0
20°	666.9	686.6	708.8	735.8	765.4	799.8	853.9	1168.9	1801.4	2165.6	2497.9
22.5°	625.1	644.8	671.8	706.3	740.7	775.2	866.3	1392.9	2296.1	2756.3	3177.1
25°	590.6	615.2	642.3	671.8	711.2	750.6	895.8	1707.9	2891.6	3484.7	3782.5
27.5°	558.6	588.2	615.2	639.8	674.3	718.6	962.2	2128.7	3595.4	4198.4	4432.2
30°	526.6	561.1	588.2	612.8	647.2	694.0	1063.1	2665.2	4378.0	4963.7	4988.3
32.5°	499.6	531.6	563.6	588.2	620.2	674.3	1203.4	3292.7	5180.3	5746.3	5515.0
35°	470.0	507.0	536.5	563.6	598.0	657.1	1365.8	3969.5	5989.9	6464.9	6039.2
37.5°	440.5	482.3	519.3	538.9	573.4	639.8	1483.9	4675.8	6816.8	7166.3	6499.4
40°	413.4	460.2	502.0	521.7	538.9	617.7	1501.2	5399.3	7656.0	7857.8	6932.5
42.5°	383.9	435.6	472.5	499.6	514.3	602.9	1397.8	6009.6	8359.8	8546.9	7498.5
45°	351.9	413.4	443.0	462.7	492.2	612.8	1264.9	6482.1	9164.6	9486.9	8431.2
47.5°	319.9	388.8	413.4	428.2	467.6	671.8	1215.7	6797.1	10491.0	11160.4	10003.7
50°	290.4	366.7	393.8	391.3	462.7	748.1	1269.8	7035.8	12484.4	13271.9	12159.5
52.5°	258.4	342.1	374.1	364.2	499.6	807.2	1378.1	7225.3	14017.5	15747.6	15056.1
55°	231.3	315.0	344.5	342.1	568.5	851.5	1461.8	6226.2	14652.5	18048.6	18319.3
57.5°	211.6	285.5	310.1	351.9	612.8	851.5	1690.7	4419.9	14664.8	19741.7	22650.5
60°	194.4	258.4	275.6	386.4	595.5	807.2	1673.4	2707.0	13515.5	19626.0	24954.0
62.5°	179.6	233.8	255.9	396.2	526.6	799.8	1511.0	1678.4	11527.1	18132.2	23283.0
65°	167.3	214.1	246.1	364.2	477.4	856.4	1018.8	1205.9	9349.1	16429.3	21365.9
67.5°	155.0	196.9	260.9	297.8	433.1	765.4	735.8	856.4	7338.5	14561.4	19606.3
70°	145.2	187.0	275.6	243.6	379.0	598.0	521.7	649.7	5618.3	12149.7	17128.2
72.5°	137.8	174.7	231.3	192.0	307.6	462.7	364.2	472.5	3671.7	9484.5	13963.4
75°	130.4	160.0	169.8	155.0	228.9	302.7	275.6	317.5	2187.8	6932.5	10594.4
77.5°	128.0	150.1	137.8	125.5	155.0	179.6	209.2	214.1	1068.0	3467.5	5551.9
80°	113.2	135.4	118.1	103.4	105.8	118.1	155.0	142.7	243.6	881.0	1481.5
82.5°	88.6	105.8	98.4	86.1	86.1	86.1	103.4	96.0	78.8	396.2	669.4
85°	61.5	73.8	73.8	68.9	66.4	66.4	64.0	61.5	22.1	24.6	36.9
87.5°	41.8	51.7	54.1	51.7	44.3	39.4	34.5	29.5	9.8	0.0	4.9
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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CATALOG NUMBER: GWS-SA4F-760-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9	1077.9
2.5°	1141.9	1149.3	1149.3	1139.4	1132.0	1112.3	1092.7	1073.0	1068.0	1065.6
5°	1141.9	1171.4	1186.2	1183.7	1166.5	1134.5	1092.7	1048.4	1036.1	1031.1
7.5°	1124.7	1181.3	1225.5	1232.9	1200.9	1144.3	1068.0	1001.6	984.4	977.0
10°	1164.0	1274.8	1363.4	1375.7	1338.8	1228.0	1105.0	991.8	964.7	947.5
12.5°	1375.7	1557.8	1666.1	1717.7	1646.4	1506.1	1301.8	1100.0	1038.5	1011.4
15°	1803.9	2062.3	2269.0	2269.0	2202.5	1954.0	1695.6	1368.3	1284.6	1210.8
17.5°	2352.7	2677.5	2859.6	2839.9	2739.0	2564.3	2254.2	1784.2	1614.4	1538.1
20°	2977.7	3172.2	3214.0	3201.7	3157.4	3056.5	2842.4	2337.9	2109.0	1990.9
22.5°	3519.1	3467.5	3405.9	3356.7	3344.4	3374.0	3344.4	2955.6	2775.9	2566.8
25°	3885.8	3593.0	3408.4	3319.8	3361.6	3531.5	3716.0	3570.8	3428.1	3211.5
27.5°	4085.2	3578.2	3312.4	3221.4	3292.7	3533.9	3935.0	4181.1	4033.5	3930.1
30°	4193.4	3565.9	3250.9	3162.3	3270.6	3573.3	4087.6	4752.1	4757.0	4592.1
32.5°	4348.5	3644.7	3263.2	3182.0	3327.2	3691.4	4279.6	5332.9	5475.6	5387.0
35°	4523.2	3765.2	3319.8	3246.0	3425.6	3848.9	4493.7	5918.6	6216.3	6186.8
37.5°	4688.1	3900.6	3452.7	3381.3	3575.8	3984.3	4700.4	6494.4	6907.9	7011.2
40°	4860.4	4090.1	3861.2	3930.1	4038.4	4198.4	4885.0	6994.0	7668.3	7823.3
42.5°	5266.4	4747.2	5096.6	5227.0	5241.8	4912.0	5288.6	7633.8	8416.4	8601.0
45°	6172.0	5916.1	6917.7	7102.3	7006.3	6007.2	6260.6	8556.7	9462.3	9555.8
47.5°	7316.4	7434.5	9410.6	10048.0	9472.2	7299.2	7439.4	10498.4	11376.9	11342.5
50°	8650.2	9208.9	12240.7	13744.4	12366.2	8977.5	8797.9	12885.5	13951.1	13845.3
52.5°	10227.7	11271.1	15641.8	17777.9	16473.6	10865.1	10791.2	16047.8	16697.5	16360.4
55°	12213.7	13262.0	19554.7	22539.8	20684.2	13168.5	13422.0	19714.6	19840.1	18769.6
57.5°	15176.6	15858.3	24166.5	28000.6	25079.5	16298.8	18137.2	24594.7	23093.5	21065.7
60°	20556.3	19197.8	28623.2	33587.0	29755.3	20701.5	24356.0	27486.3	24176.3	21380.7
62.5°	22429.0	22032.8	31413.9	35949.5	32900.4	24316.6	25972.8	25847.3	22773.6	20189.6
65°	19591.6	21326.5	30914.4	34701.8	32496.8	23721.0	23307.6	24038.5	21193.6	18380.8
67.5°	18097.8	19667.9	29021.9	31258.9	30259.8	21700.6	20775.3	20575.9	17792.6	15553.2
70°	16591.7	18147.0	26278.0	26556.0	26090.9	18407.9	17192.2	15855.9	13298.9	11352.3
72.5°	14780.4	15636.8	22470.9	21151.8	20625.2	14458.0	14202.1	11940.5	9969.3	8298.3
75°	12890.4	12641.9	17519.5	14517.1	14910.9	11249.0	11994.6	8768.3	7304.1	5972.7
77.5°	9376.2	9191.6	11733.8	8817.6	9765.0	7368.1	6619.9	3499.5	3332.1	2874.4
80°	5232.0	6307.4	6336.9	4941.6	6164.7	4803.8	1656.2	115.7	73.8	108.3
82.5°	2431.4	2712.0	3435.5	2291.1	3516.7	2379.7	342.1	0.0	0.0	0.0
85°	787.5	1151.7	964.7	337.1	851.5	804.7	56.6	0.0	0.0	0.0
87.5°	46.8	96.0	24.6	0.0	0.0	0.0	0.0	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

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