

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: STREETWORKS

Report Number: P324323

Luminaire Tested: **GAN-SA9B-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9B-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30098 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 374
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



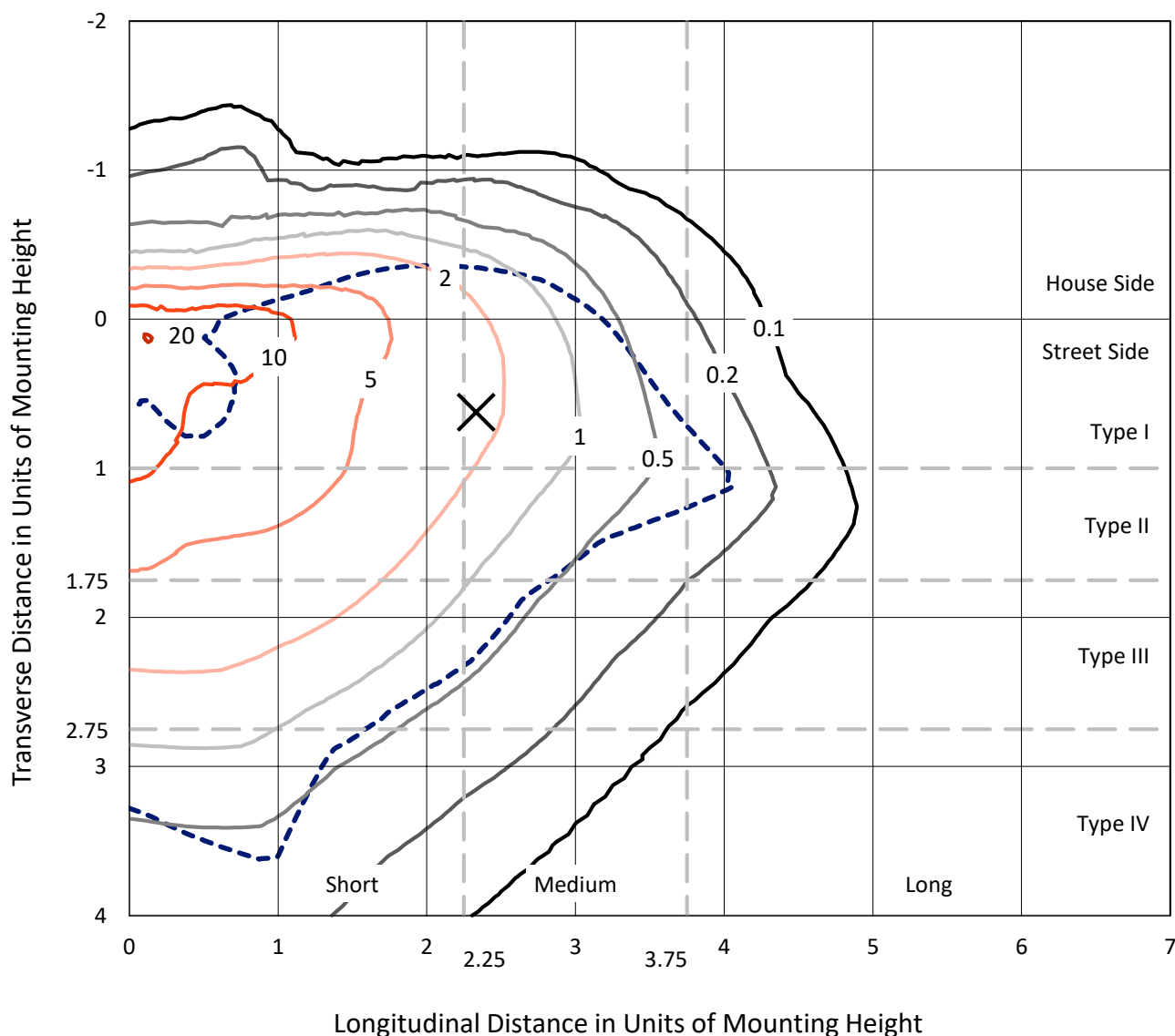
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

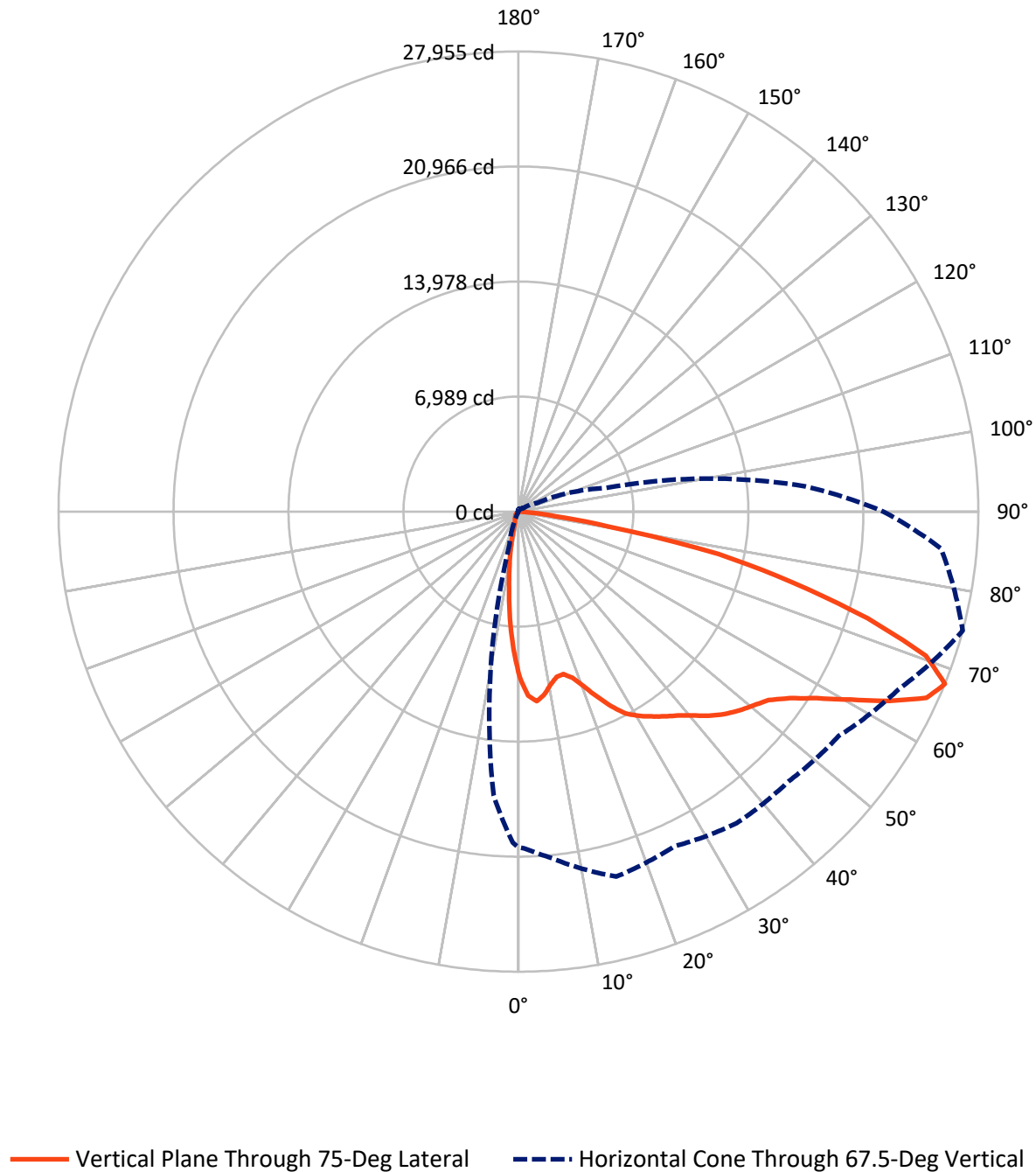
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4516.5	0.0	4516.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	25581.5	0.0	25581.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	30098.0	0.0	30098.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	765.9	2.5
10°-20°	1508.1	5.0
20°-30°	2133.6	7.1
30°-40°	3137.0	10.4
40°-50°	4508.8	15.0
50°-60°	6347.3	21.1
60°-70°	7413.0	24.6
70°-80°	3781.9	12.6
80°-90°	502.4	1.7
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°	30098.0	100.0
0°-180°	30098.0	100.0

Coefficient of Utilization



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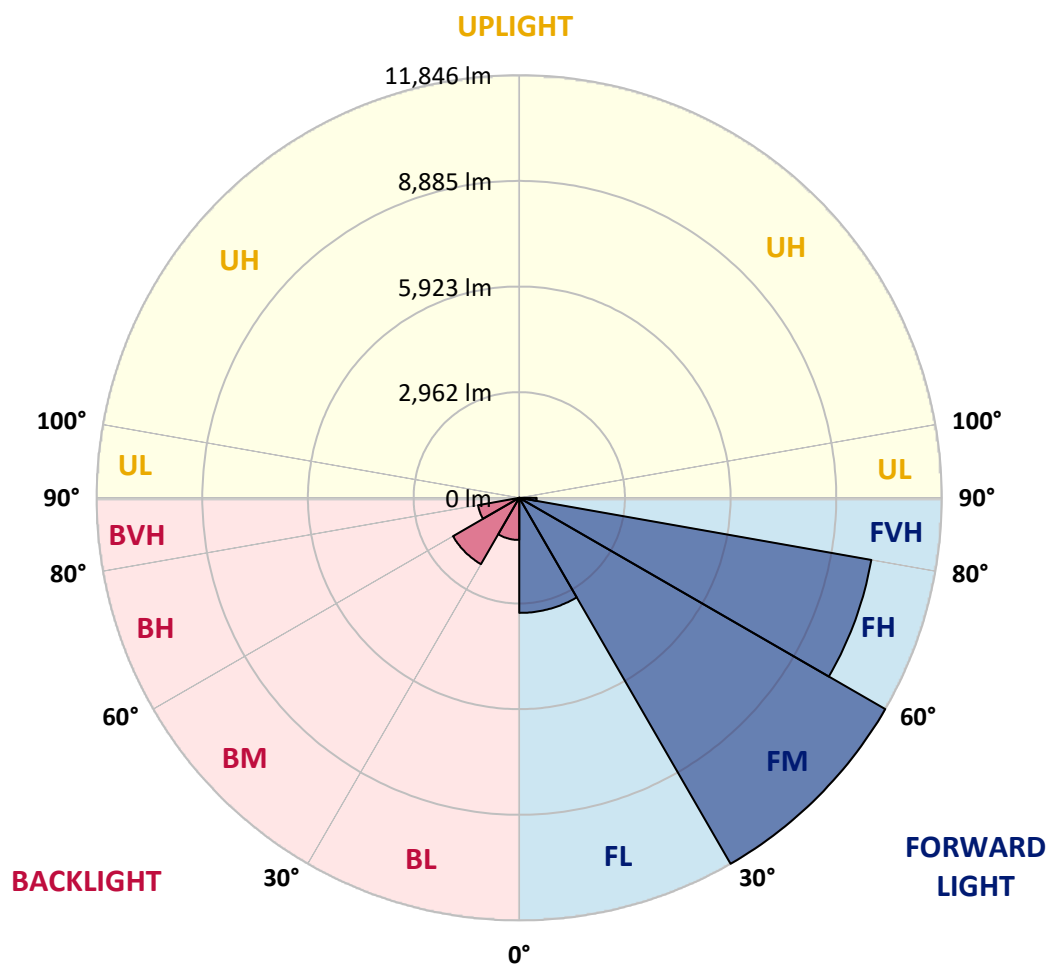
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3226.5	10.7			
FM	(30°-60°)	11846.0	39.4			
FH	(60°-80°)	10021.8	33.3			G4/12000
FVH	(80°-90°)	487.2	1.6			G3/500
BL	(0°-30°)	1181.1	3.9	B3/2500		
BM	(30°-60°)	2147.0	7.1	B2/2500		
BH	(60°-80°)	1173.1	3.9	B3/2500		G3/2500
BVH	(80°-90°)	15.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4
2.5°	10945.7	10962.8	11051.2	11256.5	11480.4	11497.5	11648.6	11493.2	11440.4	11189.5	10930.0
5°	11028.4	11094.0	11397.7	12000.8	12524.0	12692.3	12812.0	12506.9	12186.1	11573.0	10918.6
7.5°	10362.6	10472.3	10950.0	12082.0	13017.4	13430.8	13509.3	13031.6	12246.0	11236.6	10252.8
10°	9509.9	9635.4	10211.4	11603.0	12887.6	13596.2	13704.6	13078.7	11949.5	10691.9	9532.8
12.5°	8819.9	8966.7	9555.6	11064.0	12441.3	13225.5	13439.4	12920.4	11692.8	10305.5	9040.9
15°	8501.9	8670.2	9288.9	10716.2	11946.6	12564.0	12740.8	12516.9	11550.2	10244.2	8926.8
17.5°	8684.4	8866.9	9505.7	10746.1	11481.8	11745.6	11888.1	11979.4	11550.2	10613.5	9260.4
20°	9433.0	9629.7	10305.5	11049.8	11096.8	10998.5	11151.0	11471.8	11684.3	11315.0	10061.7
22.5°	10468.1	10699.0	11461.8	11570.2	10908.6	10536.5	10556.5	11059.8	11928.1	12204.7	11173.8
25°	11729.9	12012.2	12787.8	12345.8	10987.1	10261.3	10254.2	10720.4	12166.2	13095.8	12412.8
27.5°	12983.1	13294.0	13975.5	13292.5	11310.7	10211.4	10197.2	10617.8	12398.6	13888.5	13765.9
30°	14033.9	14336.2	14923.6	13978.3	11660.0	10328.3	10259.9	10727.6	12536.9	14403.2	14752.5
32.5°	14889.4	15131.8	15606.6	14450.3	12033.6	10555.0	10406.8	11021.3	12772.1	14838.1	15659.3
35°	15830.4	16085.6	16275.3	14899.4	12452.8	10881.5	10669.1	11487.5	13134.3	15280.1	16653.1
37.5°	16904.0	17157.8	17135.0	15310.0	12984.6	11421.9	11286.5	12226.1	13697.5	15717.8	17762.4
40°	17954.8	18214.3	18029.0	15759.1	13609.1	12313.0	12213.2	13335.3	14451.7	16278.1	19062.7
42.5°	18938.6	19219.5	18823.1	16184.0	14353.3	13436.5	13607.6	14763.9	15395.6	16968.2	20183.3
45°	19731.4	20017.9	19489.0	16597.5	15137.5	14799.6	15314.3	16346.6	16530.5	17551.3	20940.4
47.5°	20307.4	20578.3	19950.9	17011.0	16141.2	16466.3	17363.1	18006.2	17555.6	18057.5	21477.9
50°	20675.2	20886.2	20086.4	17528.5	17458.7	18411.1	19497.5	19811.2	18520.9	18513.7	22130.9
52.5°	20909.0	21004.6	20186.2	18068.9	18833.1	20528.4	21587.7	21686.1	19514.6	19015.6	23010.6
55°	21714.6	21791.6	20893.4	18723.3	19969.5	22383.3	23478.3	23387.0	20639.6	19998.0	24048.6
57.5°	23089.1	23170.3	22354.8	19664.3	20889.1	23529.6	24848.5	25012.4	21958.4	21378.1	25160.7
60°	23779.1	23930.3	23639.4	20856.3	21780.2	24262.5	25782.4	26305.6	23606.6	23197.4	26238.6
62.5°	23153.2	23372.8	23794.8	22178.0	22665.6	24666.0	26073.2	26769.0	25294.7	25317.6	26903.0
65°	21904.2	22079.6	22795.3	22902.3	23178.9	24616.1	25354.6	26121.7	26328.4	27265.2	26867.4
67.5°	20395.8	20461.3	21068.7	22959.3	22434.6	23116.1	23196.0	23763.5	25511.5	27955.2	25788.1
70°	18224.3	18259.9	18790.3	21050.2	19279.4	19429.1	19310.7	19426.2	21932.8	26274.2	23063.4
72.5°	14667.0	14756.8	15511.0	17481.5	14045.3	13613.3	14542.9	14491.6	16891.2	22197.9	17129.3
75°	10798.8	10954.3	12093.5	14081.0	9857.8	8916.8	9595.5	9776.6	12007.9	17170.7	10711.9
77.5°	7560.9	7676.4	8779.9	10351.2	7134.6	6376.1	6130.8	6346.1	7925.9	12421.4	5396.6
80°	4355.8	4398.5	5102.9	5976.9	4807.7	5500.7	4983.1	5131.4	4749.3	5526.3	2321.2
82.5°	2850.1	2857.3	3132.4	3557.3	2994.1	3478.9	2575.0	3292.1	2921.4	2219.9	755.7
85°	1539.8	1548.4	1816.4	2525.1	1695.3	958.1	563.2	1156.3	1806.5	509.0	206.7
87.5°	169.7	155.4	547.5	918.2	470.5	87.0	29.9	129.7	289.4	32.8	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°	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4
2.5°	10797.4	10679.1	10383.9	10071.7	9820.8	9585.5	9348.8	9059.4	8835.6	8789.9	8715.8
5°	10566.4	10191.5	9572.7	8951.0	8450.6	7819.0	7418.3	7106.1	6801.0	6782.4	6721.1
7.5°	9759.5	9266.1	8395.0	7535.2	6830.9	6229.2	5621.8	5215.5	4896.1	4783.5	4716.5
10°	8983.8	8429.2	7341.3	6360.4	5731.6	5199.8	4772.1	4347.2	3962.2	3697.0	3577.3
12.5°	8442.0	7829.0	6629.9	5784.4	5333.8	4829.1	4307.3	3776.9	3333.5	3014.1	2818.8
15°	8232.4	7578.0	6391.8	5556.3	5000.2	4361.5	3694.2	3088.2	2596.3	2306.9	2131.5
17.5°	8482.0	7720.6	6373.2	5278.2	4501.2	3707.0	2969.9	2254.2	1790.8	1571.2	1458.6
20°	9115.0	8174.0	6366.1	4937.5	3908.1	2931.4	2011.8	1482.8	1201.9	1079.3	1026.6
22.5°	10010.4	8752.9	6423.1	4601.0	3290.7	2094.5	1388.7	1089.3	945.3	879.7	849.8
25°	11162.4	9565.5	6584.2	4295.9	2710.4	1562.7	1082.2	912.5	811.3	759.9	738.6
27.5°	12390.0	10500.9	6835.2	4030.7	2238.5	1246.1	926.8	781.3	708.6	673.0	653.0
30°	13402.3	11584.5	7089.0	3735.5	1896.3	1086.4	848.3	712.9	628.8	606.0	587.4
32.5°	14287.7	12404.3	7268.6	3468.9	1672.4	965.3	767.1	637.3	580.3	536.1	516.1
35°	15204.5	13087.2	7262.9	3282.1	1518.5	874.0	698.6	570.3	501.9	450.5	434.9
37.5°	16196.8	13858.6	7138.9	3122.5	1451.4	801.3	660.1	534.7	466.2	414.9	394.9
40°	17358.9	14668.4	7012.0	2972.7	1432.9	742.8	633.0	506.2	433.4	383.5	363.6
42.5°	18490.9	15398.4	6900.8	2861.5	1353.1	741.4	608.8	484.8	407.8	359.3	336.5
45°	19396.3	16078.5	6879.4	2794.5	1268.9	767.1	596.0	470.5	387.8	339.3	317.9
47.5°	20149.1	16817.1	7016.3	2747.5	1189.1	700.1	627.3	460.5	369.3	322.2	298.0
50°	21044.5	17723.9	7338.5	2670.5	1105.0	630.2	718.6	463.4	353.6	305.1	279.5
52.5°	22293.5	18978.5	7811.8	2540.7	989.5	566.0	707.2	466.2	336.5	286.6	260.9
55°	23693.6	20545.5	8320.8	2325.4	828.4	481.9	606.0	446.3	303.7	266.6	242.4
57.5°	25165.0	21967.0	8623.1	2068.8	658.7	416.3	484.8	406.3	268.0	239.5	223.8
60°	25396.0	22507.3	8484.8	1753.7	523.3	362.1	359.3	413.5	239.5	211.0	199.6
62.5°	24821.4	21828.7	7816.1	1472.8	437.7	317.9	295.1	360.7	216.7	188.2	176.8
65°	23716.4	19993.7	6732.5	1327.4	406.3	272.3	245.2	253.8	189.6	164.0	154.0
67.5°	22179.4	17544.2	5527.7	1244.7	402.1	233.8	209.6	192.5	164.0	142.6	134.0
70°	19037.0	14615.7	4409.9	1199.1	390.7	196.8	176.8	156.8	136.9	121.2	114.1
72.5°	14011.1	10356.9	3430.4	1149.2	393.5	156.8	154.0	129.7	109.8	94.1	91.2
75°	8095.6	5917.0	2249.9	931.0	375.0	121.2	128.3	91.2	77.0	65.6	65.6
77.5°	4314.4	3608.6	856.9	387.8	136.9	77.0	72.7	54.2	48.5	39.9	38.5
80°	1880.6	1588.3	258.1	108.4	75.6	41.3	27.1	24.2	21.4	17.1	15.7
82.5°	665.8	574.6	84.1	52.8	32.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	151.1	108.4	0.0	12.8	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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4
2.5°	8564.7	8533.3	8347.9	8355.1	8387.9	8434.9	8323.7	8375.0	8513.3	8645.9	8695.8
5°	6622.7	6629.9	6517.2	6587.1	6649.8	6692.6	6513.0	6515.8	6625.6	6775.3	6853.7
7.5°	4666.6	4655.2	4660.9	4827.7	4946.0	4860.5	4927.5	4695.1	4709.3	4816.3	4736.4
10°	3468.9	3312.1	3223.7	3349.2	3478.9	3431.8	3316.4	3240.8	3293.5	3411.9	3403.3
12.5°	2726.1	2500.8	2368.2	2278.4	2385.3	2296.9	2294.1	2228.5	2157.2	2170.0	2359.7
15°	2050.3	1886.3	1729.5	1585.5	1582.6	1552.7	1400.1	1229.0	1214.8	1223.3	1321.7
17.5°	1410.1	1354.5	1290.3	1166.3	1133.5	1008.0	859.7	791.3	757.1	772.8	805.6
20°	990.9	969.5	976.7	909.6	862.6	742.8	655.9	628.8	623.1	638.7	654.4
22.5°	821.2	782.8	778.5	748.5	701.5	614.5	567.5	551.8	544.6	558.9	570.3
25°	718.6	680.1	664.4	645.9	596.0	536.1	507.6	493.3	486.2	494.7	501.9
27.5°	633.0	597.4	583.1	570.3	521.8	479.1	456.2	443.4	437.7	440.6	447.7
30°	568.9	537.5	519.0	503.3	462.0	432.0	412.1	399.2	393.5	393.5	400.6
32.5°	501.9	484.8	467.7	447.7	409.2	389.2	369.3	355.0	349.3	350.7	356.4
35°	417.8	412.1	416.3	397.8	365.0	347.9	327.9	312.2	308.0	309.4	315.1
37.5°	370.7	345.0	360.7	350.7	332.2	309.4	283.7	269.5	262.3	266.6	269.5
40°	340.8	309.4	298.0	308.0	305.1	268.0	245.2	231.0	225.3	226.7	229.6
42.5°	315.1	278.0	252.4	250.9	268.0	233.8	209.6	196.8	189.6	189.6	192.5
45°	290.9	250.9	219.6	195.3	225.3	198.2	175.4	164.0	155.4	155.4	156.8
47.5°	272.3	228.1	191.1	159.7	169.7	162.5	144.0	132.6	124.0	124.0	125.5
50°	255.2	205.3	165.4	134.0	126.9	134.0	116.9	104.1	98.4	97.0	99.8
52.5°	236.7	182.5	141.2	114.1	99.8	101.2	91.2	82.7	75.6	75.6	78.4
55°	218.1	164.0	122.6	97.0	82.7	75.6	72.7	67.0	61.3	61.3	64.2
57.5°	199.6	144.0	104.1	79.8	65.6	59.9	59.9	55.6	51.3	51.3	54.2
60°	182.5	124.0	85.5	65.6	51.3	49.9	51.3	47.1	44.2	44.2	47.1
62.5°	162.5	105.5	69.9	54.2	41.3	39.9	44.2	41.3	38.5	38.5	41.3
65°	138.3	89.8	55.6	41.3	31.4	31.4	37.1	34.2	31.4	31.4	34.2
67.5°	116.9	75.6	42.8	29.9	22.8	24.2	31.4	28.5	27.1	27.1	29.9
70°	97.0	58.5	29.9	18.5	12.8	18.5	24.2	24.2	24.2	24.2	27.1
72.5°	72.7	39.9	17.1	7.1	5.7	12.8	20.0	22.8	21.4	21.4	25.7
75°	47.1	22.8	5.7	0.0	0.0	7.1	15.7	18.5	18.5	17.1	21.4
77.5°	27.1	7.1	0.0	0.0	0.0	0.0	10.0	8.6	7.1	5.7	10.0
80°	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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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CATALOG NUMBER: GAN-SA9B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4	10097.4
2.5°	8896.9	9065.1	9301.8	9552.7	9939.1	10245.6	10546.5	10804.6	10904.4	10945.7
5°	7041.9	7288.6	7635.0	8079.9	8777.1	9404.4	10040.3	10680.5	10958.5	11028.4
7.5°	5053.0	5368.1	5808.6	6366.1	7183.1	7995.8	8884.0	9823.6	10254.2	10362.6
10°	3739.8	4124.8	4629.5	5216.9	5996.8	6832.3	7800.4	8874.0	9365.9	9509.9
12.5°	2653.4	3173.8	3849.6	4563.9	5239.7	5985.4	6964.9	8148.3	8664.5	8819.9
15°	1558.4	2061.7	2861.5	3818.2	4683.7	5439.3	6434.5	7776.2	8345.1	8501.9
17.5°	894.0	1144.9	1749.4	2815.9	3990.8	5037.3	6267.7	7868.9	8539.0	8684.4
20°	682.9	762.8	1008.0	1813.6	3180.9	4642.3	6267.7	8393.6	9219.1	9433.0
22.5°	597.4	655.9	755.7	1082.2	2341.1	4218.9	6340.4	9152.1	10231.4	10468.1
25°	530.4	583.1	668.7	814.1	1596.9	3715.6	6513.0	10083.1	11423.3	11729.9
27.5°	474.8	524.7	601.7	712.9	1092.1	3108.2	6745.4	11175.3	12737.9	12983.1
30°	424.9	471.9	541.8	620.2	842.6	2419.5	6943.5	12204.7	13770.2	14033.9
32.5°	377.8	420.6	483.3	541.8	690.1	1789.4	6964.9	13020.2	14627.1	14889.4
35°	333.6	372.1	429.2	474.8	571.7	1412.9	6632.7	13727.4	15484.0	15830.4
37.5°	290.9	327.9	377.8	412.1	503.3	1152.0	6125.1	14515.9	16583.2	16904.0
40°	250.9	283.7	335.1	357.9	476.2	885.4	5573.4	15342.8	17661.1	17954.8
42.5°	213.9	245.2	295.1	339.3	417.8	661.6	4977.4	16118.4	18630.6	18938.6
45°	178.2	211.0	260.9	359.3	346.5	494.7	4340.1	16633.1	19396.3	19731.4
47.5°	144.0	181.1	249.5	342.2	276.6	363.6	3835.3	17120.7	19976.6	20307.4
50°	115.5	152.6	280.9	305.1	226.7	278.0	3624.3	17557.0	20357.3	20675.2
52.5°	94.1	128.3	265.2	233.8	189.6	229.6	3738.4	18264.2	20709.4	20909.0
55°	78.4	101.2	159.7	162.5	161.1	195.3	3879.5	19279.4	21620.5	21714.6
57.5°	68.4	81.3	111.2	125.5	135.4	173.9	3882.4	20736.5	23030.6	23089.1
60°	58.5	71.3	92.7	101.2	116.9	155.4	3741.2	21245.5	23585.2	23779.1
62.5°	51.3	62.7	77.0	84.1	98.4	139.7	3410.5	20508.4	22823.9	23153.2
65°	45.6	57.0	64.2	71.3	87.0	125.5	2865.8	19034.1	21560.6	21904.2
67.5°	39.9	49.9	57.0	64.2	78.4	111.2	2110.2	17321.8	20110.6	20395.8
70°	35.6	44.2	51.3	57.0	68.4	94.1	1280.3	14698.4	18106.0	18224.3
72.5°	34.2	39.9	47.1	51.3	59.9	82.7	648.7	10801.7	14474.5	14667.0
75°	29.9	35.6	42.8	45.6	52.8	71.3	263.8	7094.7	10489.5	10798.8
77.5°	24.2	32.8	38.5	41.3	45.6	58.5	134.0	4534.0	7361.3	7560.9
80°	8.6	24.2	32.8	34.2	38.5	42.8	88.4	2482.3	4270.2	4355.8
82.5°	0.0	15.7	25.7	24.2	27.1	32.8	57.0	1180.5	2818.8	2850.1
85°	0.0	7.1	20.0	15.7	11.4	22.8	20.0	258.1	1478.5	1539.8
87.5°	0.0	0.0	1.4	7.1	5.7	8.6	2.9	1.4	134.0	169.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)