

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 764987_320MP

Luminaire Tested: **CFB32PXX65**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 764987_320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CFB32PXX65
Description: 400W MH 6H X 5V FLOODLIGHT
Light Source: 320 WATT PULSE-START CLEAR ED-28 UNIVERSAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 13688.8 lumens
Efficiency: 45.6%
Efficacy: 39.1 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B4 - U0 - G3

Input Watts (W): 350
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: 28.75 FT

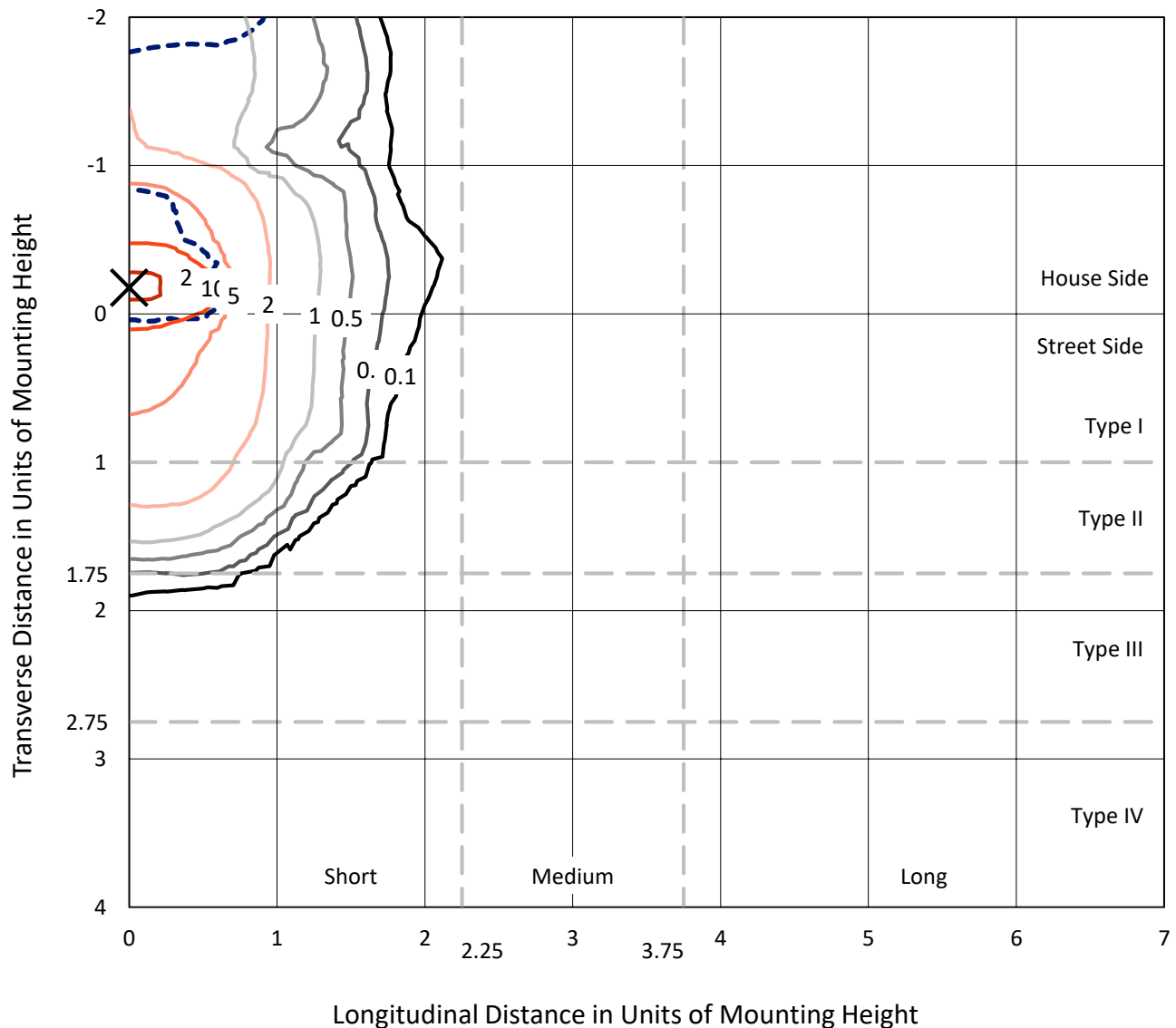


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Iso-Footcandle Lines of Horizontal Illumination

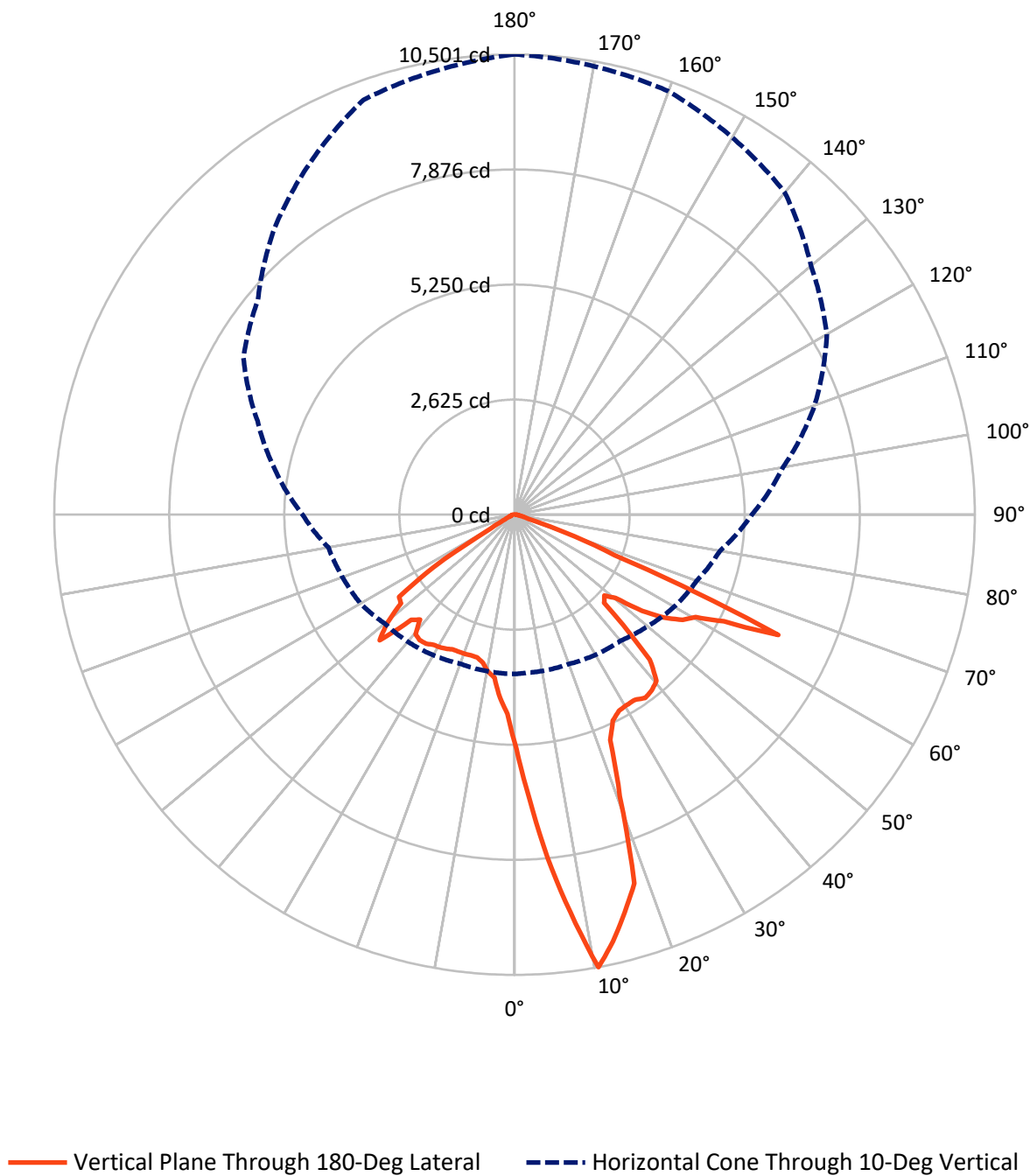
× Max cd
 --- 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 22 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



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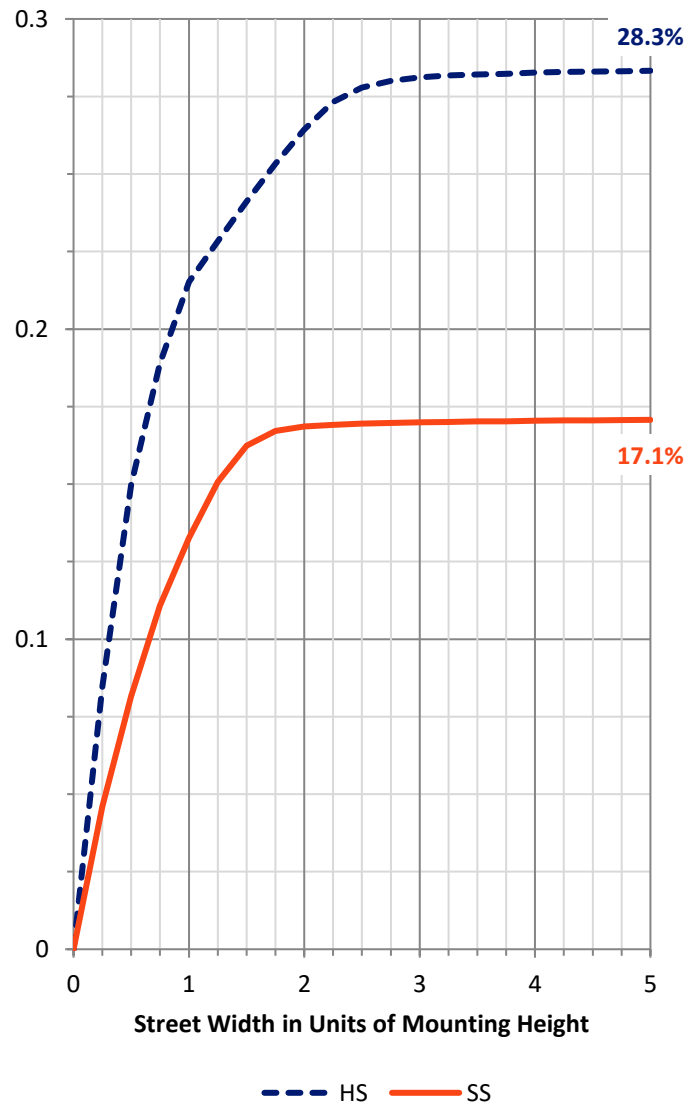
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8561.1	0.0	8561.1
	% Lamp	28.5	0.0	28.5
Street Side	Lumens	5127.7	0.0	5127.7
	% Lamp	17.1	0.0	17.1
Total	Lumens	13688.8	0.0	13688.8
	% Lamp	45.6	0.0	45.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	558.2	4.1	1.9
10°-20°	1720.7	12.6	5.7
20°-30°	2394.5	17.5	8.0
30°-40°	2577.9	18.8	8.6
40°-50°	2413.7	17.6	8.0
50°-60°	2172.6	15.9	7.2
60°-70°	1511.4	11.0	5.0
70°-80°	278.5	2.0	0.9
80°-90°	61.3	0.4	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	13688.8	100.0	45.6
0°-180°	13688.8	100.0	45.6

Coefficient of Utilization



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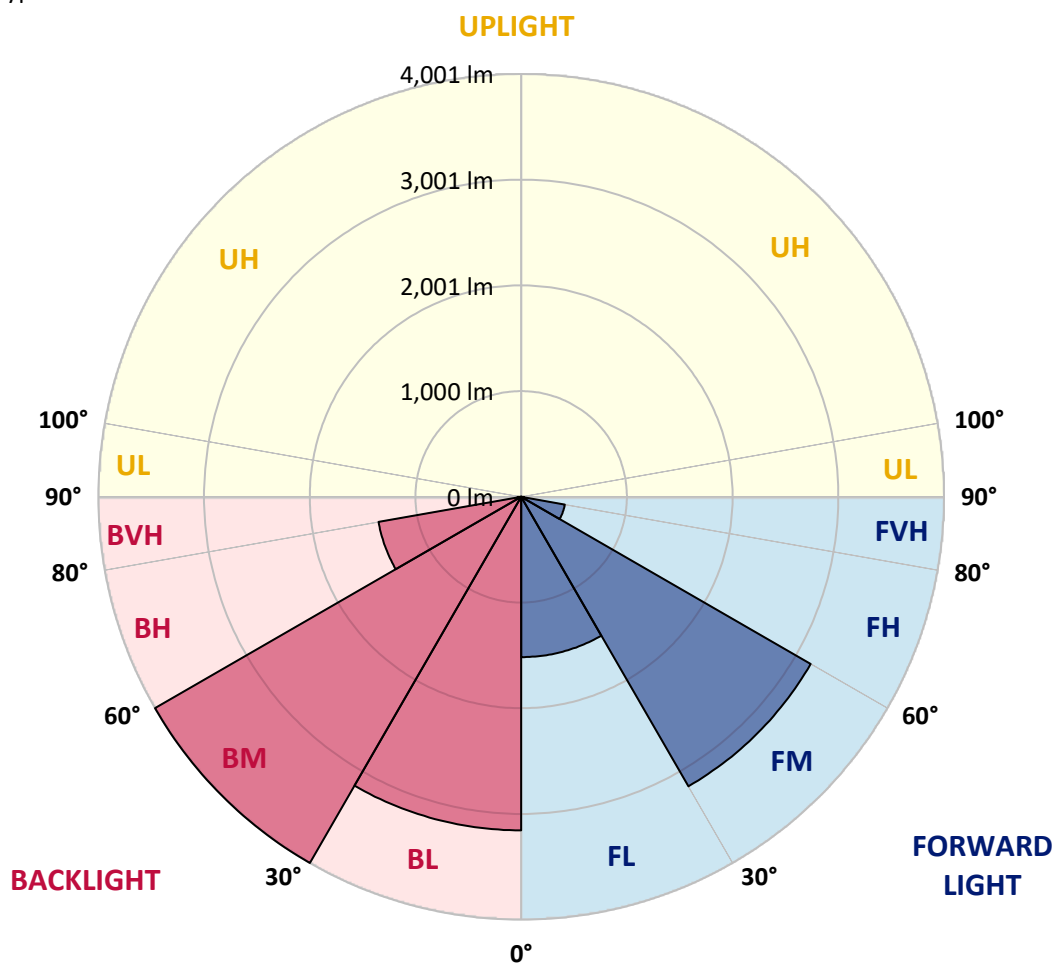
CATALOG NUMBER: CFB32PXX65

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1517.1	5.1			
FM	(30°-60°)	3163.1	10.5			
FH	(60°-80°)	419.6	1.4			G0/660
FVH	(80°-90°)	27.9	0.1			G1/100
BL	(0°-30°)	3156.2	10.5	B4/5000		
BM	(30°-60°)	4001.1	13.3	B3/5000		
BH	(60°-80°)	1370.3	4.6	B3/2500		G3/2500
BVH	(80°-90°)	33.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		16311.2	54.4			

BUG Rating: B4-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	20°	40°	50°	60°	70°	80°	90°	100°	110°
0°	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5
2.5°	4548.2	4792.9	4526.4	4826.6	4766.5	4921.2	5120.4	5270.5	5557.0	5740.8	5748.9
5°	4198.9	4100.7	4187.1	4450.9	4443.6	4518.2	4812.0	5109.5	5530.6	6015.5	6226.5
7.5°	3746.8	3765.9	3867.8	4010.6	4221.6	4461.8	4544.6	4951.2	5507.9	6140.1	7001.5
10°	3634.0	3619.5	3626.7	3758.6	3961.5	4206.2	4420.9	4759.2	5414.2	6219.2	7287.1
12.5°	3461.2	3464.8	3473.0	3660.4	3705.9	3860.5	4217.1	4503.6	5270.5	6305.6	7471.8
15°	3367.5	3367.5	3401.2	3547.6	3623.1	3716.8	4063.4	4368.1	5266.8	6614.0	7953.0
17.5°	3359.3	3352.0	3367.5	3393.9	3473.0	3604.0	3852.3	4248.0	5275.0	6926.0	8114.9
20°	3371.1	3367.5	3367.5	3311.1	3299.3	3476.7	3649.5	4153.4	5384.2	7709.2	8254.1
22.5°	3374.8	3367.5	3352.0	3212.9	3160.1	3179.2	3487.6	3871.4	5500.6	8092.2	8454.2
25°	3382.0	3378.4	3341.1	3149.2	3081.0	3084.6	3281.1	3581.3	5436.0	8273.2	8273.2
27.5°	3431.2	3404.8	3332.9	3126.4	3024.6	3013.6	3070.0	3318.4	5222.3	8570.6	8009.4
30°	3473.0	3446.6	3348.4	3130.1	2990.9	2885.4	2855.4	3325.7	4623.7	7426.3	7336.3
32.5°	3498.5	3480.3	3378.4	3115.5	2957.2	2806.2	2708.9	2705.3	3322.0	5692.5	5180.4
35°	3570.3	3540.3	3404.8	3103.7	2920.0	2723.5	2547.0	2475.1	2663.4	4089.8	3938.8
37.5°	3585.8	3563.1	3446.6	3089.1	2867.2	2652.5	2423.3	2328.7	2325.0	2441.5	2964.5
40°	3544.0	3559.4	3476.7	3073.7	2821.7	2550.6	2298.7	2193.1	2201.3	2261.4	2467.9
42.5°	3220.1	3081.0	3453.9	3062.8	2784.4	2501.5	2231.4	2103.1	2046.7	2166.8	2374.2
45°	3367.5	3258.3	3137.4	3073.7	2746.2	2445.1	2155.9	2016.7	1960.3	2057.6	2302.3
47.5°	4206.2	4195.3	3577.6	3073.7	2712.6	2358.7	2073.1	1870.2	1873.9	1997.6	2226.8
50°	3829.6	4134.3	4228.9	2930.9	2686.2	2268.6	1937.5	1768.3	1734.7	1926.6	2125.8
52.5°	3284.7	3325.7	3950.6	2640.7	2622.5	2178.6	1839.3	1655.5	1610.1	1817.5	2031.2
55°	3235.6	3314.7	2998.2	2923.6	1944.8	2027.6	1678.3	1204.4	1328.1	1534.6	1881.1
57.5°	2208.6	2426.9	2577.0	2125.8	861.4	1752.9	914.2	775.0	805.0	1139.8	1169.8
60°	632.2	602.2	1260.8	669.5	745.0	1095.2	530.3	515.8	583.1	734.1	729.5
62.5°	350.2	323.8	338.4	308.4	278.4	387.5	323.8	361.1	454.8	609.5	429.4
65°	211.0	225.6	218.3	222.0	244.7	259.2	267.4	331.1	364.8	537.6	383.9
67.5°	150.1	154.6	161.9	158.3	199.2	244.7	244.7	293.8	320.2	406.6	331.1
70°	109.2	109.2	112.8	128.3	172.8	222.0	225.6	237.4	271.1	304.7	255.6
72.5°	90.1	93.7	93.7	101.9	146.5	199.2	199.2	206.5	202.9	211.0	211.0
75°	79.1	79.1	79.1	82.8	105.5	154.6	184.7	161.9	169.2	176.5	176.5
77.5°	67.3	67.3	71.9	71.9	82.8	116.4	165.6	135.5	142.8	146.5	131.9
80°	63.7	63.7	63.7	63.7	71.9	86.4	90.1	105.5	101.9	109.2	101.9
82.5°	60.0	56.4	60.0	56.4	56.4	60.0	71.9	75.5	82.8	82.8	82.8
85°	56.4	56.4	56.4	52.8	52.8	49.1	49.1	52.8	49.1	60.0	56.4
87.5°	49.1	37.3	49.1	45.5	45.5	40.9	37.3	33.7	37.3	37.3	40.9
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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CANDELA DISTRIBUTION (continued):

	120°	130°	140°	160°	180°	200°	220°	230°	240°	250°	260°
0°	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5
2.5°	5993.6	6233.8	6015.5	6624.9	6478.5	6324.7	5748.9	5888.1	5643.4	5417.8	5331.4
5°	6707.7	7174.3	7663.7	8013.9	7859.3	7520.9	7107.0	6636.7	6136.4	5869.0	5444.2
7.5°	7404.5	8111.3	8724.4	9259.2	9161.0	8694.4	7919.3	7260.8	6760.5	6080.0	5504.2
10°	8227.7	8833.5	9594.0	10278.0	10500.9	10071.6	8521.5	7637.4	7140.7	6237.4	5515.2
12.5°	8597.0	9616.7	10270.8	10289.9	9992.4	10060.6	9356.6	8517.9	7517.3	6459.4	5504.2
15°	8819.0	9812.3	10177.1	9643.1	9409.3	9529.4	9451.2	8841.7	8051.2	7035.2	5617.0
17.5°	9029.1	9736.8	9424.8	9405.7	8845.4	9300.2	9141.9	9044.6	8638.0	7720.1	5846.3
20°	8739.8	9183.7	8807.2	8092.2	6858.7	7581.0	8822.6	9002.7	8833.5	8216.8	6166.5
22.5°	8461.5	8111.3	8431.5	6102.8	5583.4	6365.7	8262.3	8476.0	8988.2	9010.9	6911.5
25°	8021.2	7983.9	6964.2	5384.2	5210.4	5398.7	7618.3	9018.2	8728.0	9236.5	7513.6
27.5°	7573.7	7249.8	5752.6	5252.3	5067.6	4977.6	6219.2	8465.1	8799.9	9153.7	7806.5
30°	6982.4	5391.4	5030.3	5192.2	5041.2	4864.8	4894.8	7103.4	8976.3	8789.0	7840.2
32.5°	5951.8	4639.2	4722.0	5157.7	5037.6	4789.3	4683.7	5530.6	9217.4	8356.0	7693.8
35°	4552.8	4195.3	4461.8	5086.7	5135.8	4669.2	4473.6	4752.0	7822.0	8201.3	7121.6
37.5°	3374.8	3799.6	4334.4	4992.1	5086.7	4590.1	4326.3	4360.8	6452.1	7953.0	6358.4
40°	2938.1	3570.3	4221.6	4887.5	4988.5	4639.2	4311.7	4209.8	5011.2	7234.4	4917.5
42.5°	2659.8	3348.4	3973.3	4653.7	4526.4	4530.0	4338.1	4089.8	3818.7	6170.1	3769.6
45°	2547.0	3100.1	3829.6	3596.7	2867.2	3397.5	4420.9	3938.8	3401.2	4443.6	2923.6
47.5°	2467.9	2821.7	3566.7	2557.9	2758.0	2517.0	4364.5	3725.0	3096.4	2626.1	2287.8
50°	2385.1	2735.3	2859.0	2471.5	2987.3	2471.5	4040.6	3581.3	2738.9	2374.2	2114.0
52.5°	2253.2	2622.5	1218.9	2742.6	3645.8	3024.6	2411.5	3337.5	2580.7	2223.2	1953.0
55°	2054.0	1632.8	906.9	3374.8	4146.1	3566.7	2013.0	2761.7	2460.6	1993.9	1749.2
57.5°	1854.8	903.3	1004.2	4007.0	4526.4	3905.1	2027.6	1659.2	2291.4	1873.9	1621.9
60°	1229.8	681.3	1828.4	4278.0	4748.3	4420.9	2355.1	1113.4	2166.8	1757.4	1493.6
62.5°	511.2	741.4	2317.8	4826.6	5361.4	5067.6	2460.6	1287.1	1824.7	1576.4	1256.2
65°	403.0	715.0	2471.5	5545.2	6614.0	6478.5	2524.3	1553.7	884.2	1440.9	1125.2
67.5°	364.8	380.2	1448.2	5902.7	2460.6	4722.0	2569.7	1587.3	767.7	1192.5	876.9
70°	285.6	285.6	530.3	2418.7	1208.0	1757.4	2513.3	1388.1	676.8	519.4	463.0
72.5°	229.2	229.2	274.7	785.9	346.6	669.5	1204.4	695.9	350.2	429.4	394.8
75°	188.3	181.0	184.7	214.7	229.2	297.5	481.2	331.1	278.4	304.7	297.5
77.5°	154.6	146.5	139.2	146.5	169.2	191.9	293.8	255.6	188.3	222.0	229.2
80°	131.9	112.8	90.1	109.2	109.2	123.7	146.5	188.3	139.2	154.6	165.6
82.5°	82.8	75.5	71.9	71.9	79.1	75.5	93.7	101.9	101.9	90.1	98.2
85°	60.0	60.0	60.0	63.7	60.0	60.0	60.0	67.3	56.4	60.0	56.4
87.5°	45.5	37.3	40.9	40.9	40.9	37.3	45.5	37.3	40.9	33.7	33.7
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):

	270°	280°	290°	300°	310°	320°	340°	360°
0°	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5	5340.5
2.5°	5184.1	4996.7	4822.9	4683.7	4713.8	4521.8	4616.4	4548.2
5°	5060.3	4766.5	4484.5	4338.1	4345.4	4239.8	4228.9	4198.9
7.5°	4947.5	4552.8	4292.6	4195.3	4063.4	4025.2	3777.7	3746.8
10°	4834.7	4311.7	4172.5	4056.1	3864.2	3785.0	3619.5	3634.0
12.5°	4713.8	4176.2	4003.3	3815.0	3709.5	3615.8	3461.2	3461.2
15°	4593.7	4051.5	3908.7	3686.8	3637.7	3404.8	3314.7	3367.5
17.5°	4590.1	3961.5	3781.4	3596.7	3363.9	3322.0	3269.3	3359.3
20°	4620.1	3834.1	3649.5	3529.4	3269.3	3235.6	3265.6	3371.1
22.5°	4657.4	3785.0	3554.9	3272.9	3209.2	3220.1	3272.9	3374.8
25°	4672.8	3735.9	3494.8	3228.3	3182.8	3232.0	3224.7	3382.0
27.5°	4631.0	3604.0	3393.9	3205.6	3190.1	3220.1	3224.7	3431.2
30°	4567.3	3473.0	3186.5	3171.9	3186.5	3171.9	3242.9	3473.0
32.5°	4405.4	3355.7	3100.1	3100.1	3163.7	3145.5	3302.9	3498.5
35°	4172.5	3179.2	3013.6	3047.3	3096.4	3152.8	3307.5	3570.3
37.5°	3890.5	2911.8	2897.2	2994.5	3054.6	3119.2	3322.0	3585.8
40°	3299.3	2776.2	2818.1	2915.4	3032.7	3059.1	3385.7	3544.0
42.5°	2867.2	2596.1	2716.2	2832.6	2920.0	3070.0	3212.9	3220.1
45°	2501.5	2325.0	2580.7	2754.4	2874.5	3050.9	2682.5	3367.5
47.5°	2231.4	2170.4	2396.9	2615.2	2829.0	2971.8	3103.7	4206.2
50°	1986.7	2062.2	2295.0	2487.0	2788.1	2557.9	4299.9	3829.6
52.5°	1851.1	1884.8	2133.1	2423.3	2716.2	2358.7	4127.0	3284.7
55°	1640.1	1726.5	1903.9	2284.1	2291.4	3533.1	3581.3	3235.6
57.5°	1497.3	1576.4	1798.4	2208.6	2298.7	3894.2	2686.2	2208.6
60°	1369.0	1403.6	1711.9	1937.5	3122.8	3924.2	1166.2	632.2
62.5°	1155.2	1260.8	1530.9	1264.4	3385.7	3404.8	556.7	350.2
65°	1019.7	1136.1	1377.2	917.8	2460.6	1602.8	274.7	211.0
67.5°	808.7	755.9	921.5	481.2	891.4	443.9	206.5	150.1
70°	417.5	459.4	447.5	312.0	320.2	259.2	139.2	109.2
72.5°	357.5	372.0	312.0	241.1	222.0	146.5	120.1	90.1
75°	271.1	271.1	206.5	161.9	131.9	109.2	105.5	79.1
77.5°	214.7	211.0	154.6	120.1	101.9	90.1	86.4	67.3
80°	135.5	131.9	112.8	93.7	82.8	71.9	75.5	63.7
82.5°	98.2	90.1	71.9	63.7	63.7	63.7	63.7	60.0
85°	56.4	56.4	52.8	52.8	56.4	56.4	60.0	56.4
87.5°	33.7	33.7	37.3	37.3	40.9	45.5	49.1	49.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)