

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: P158954

Luminaire Tested: **VST-F11-LED-E-U-SLL-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158954
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33715)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F11-LED-E-U-SLL-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (77) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22288.1 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 282.7
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



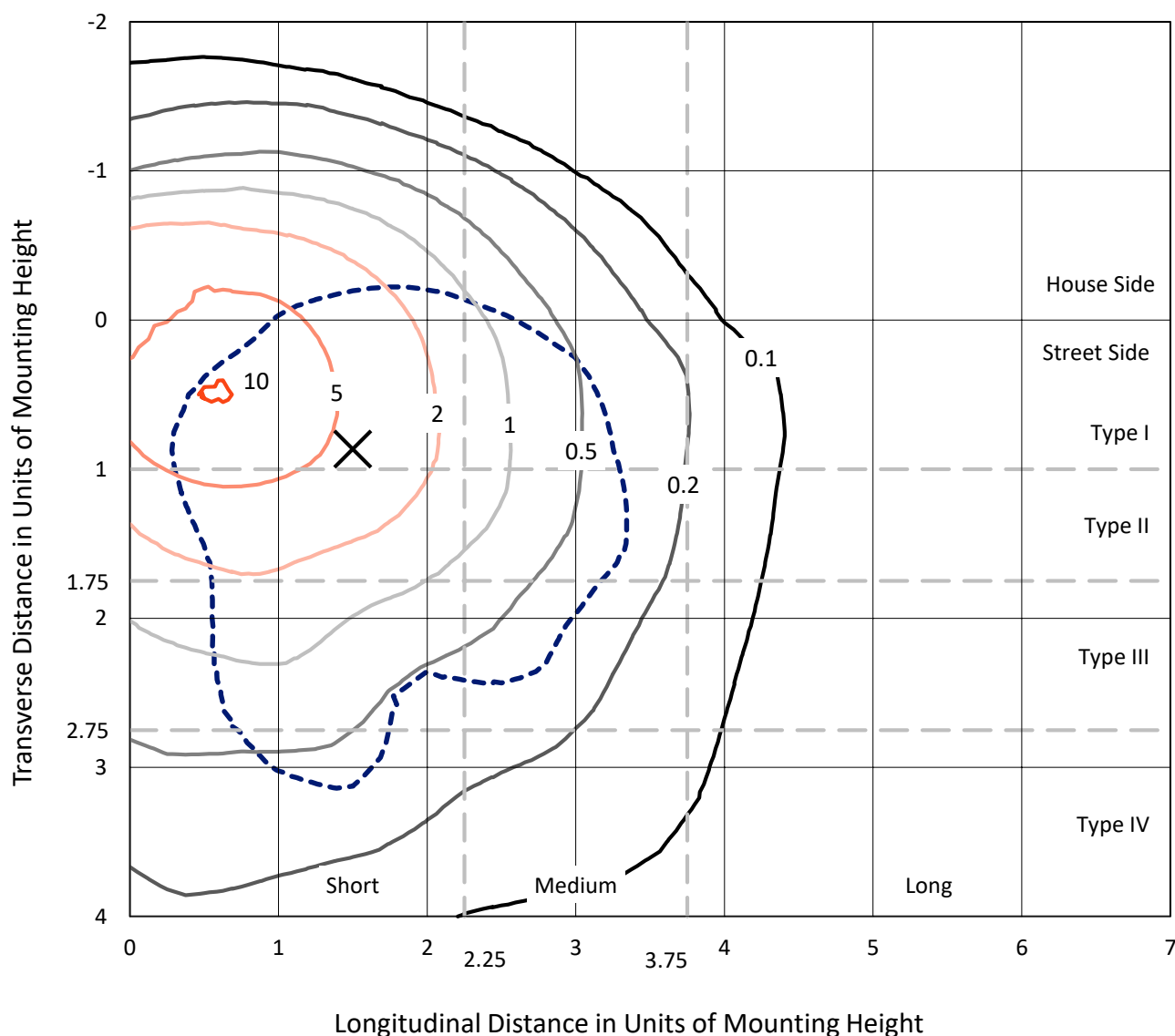
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

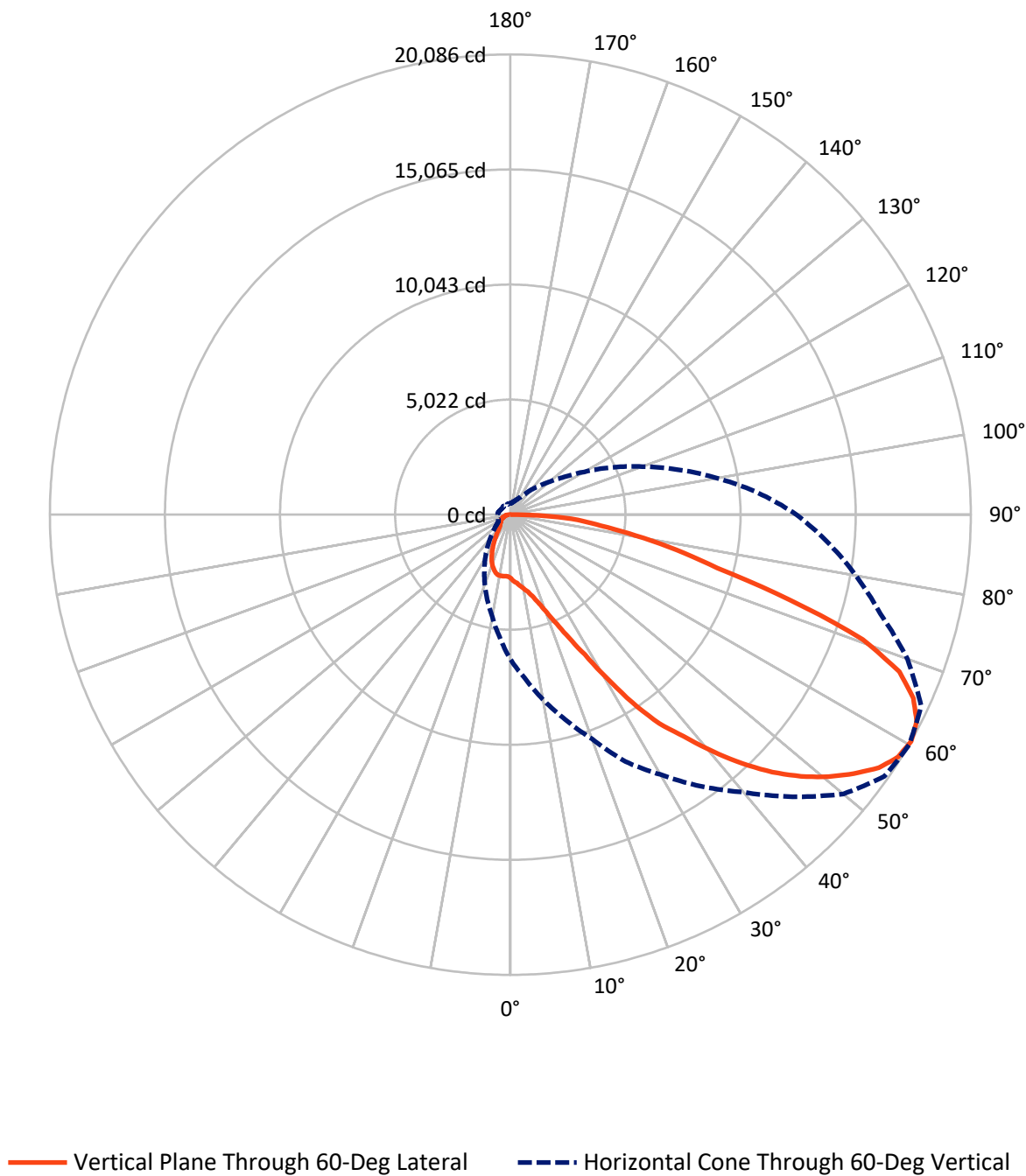


Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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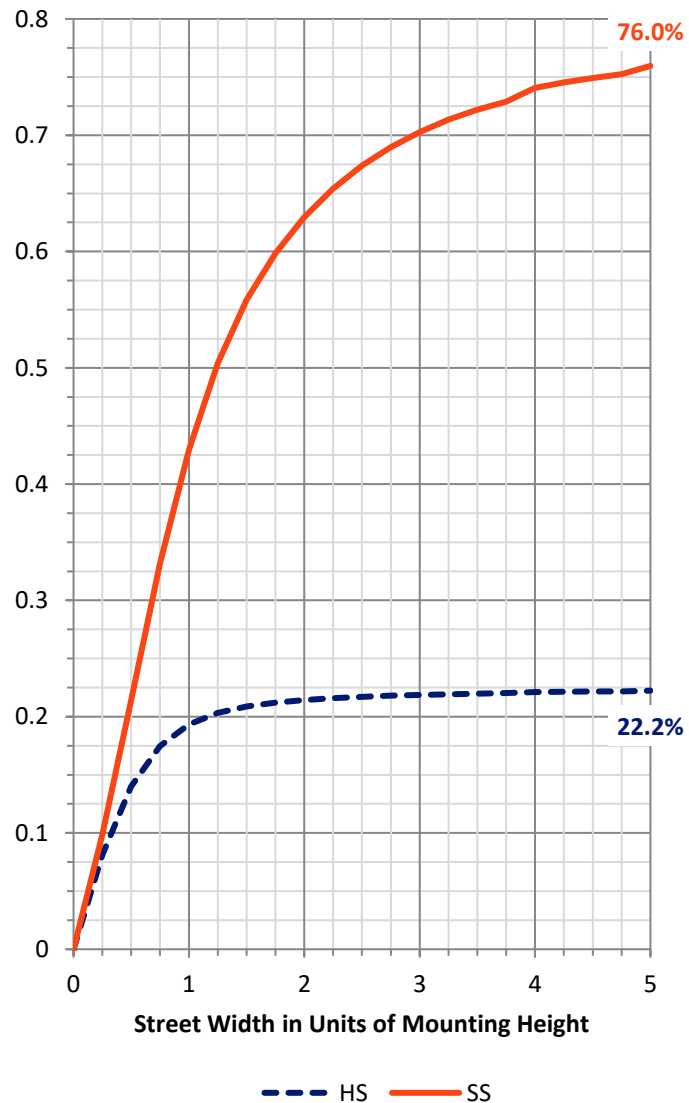
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5018.6	0.0	5018.6
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	17269.5	0.0	17269.5
	% Fixture	77.5	0.0	77.5
Total	Lumens	22288.1	0.0	22288.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.5	1.2
10°-20°	882.9	4.0
20°-30°	1675.5	7.5
30°-40°	2638.6	11.8
40°-50°	3682.8	16.5
50°-60°	4554.8	20.4
60°-70°	4721.3	21.2
70°-80°	2970.8	13.3
80°-90°	888.0	4.0
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°	22288.1	100.0
0°-180°	22288.1	100.0

Coefficient of Utilization



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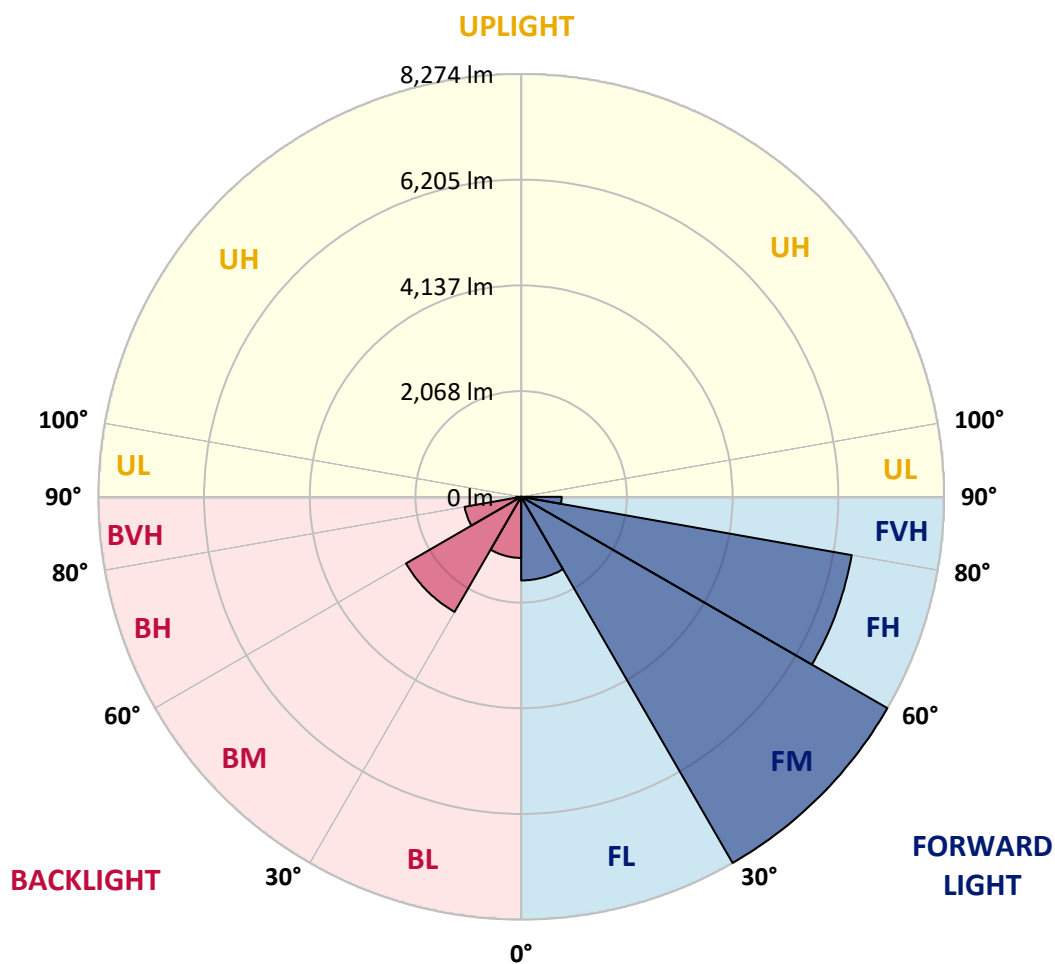
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1636.3	7.3			
FM	(30°-60°)	8273.7	37.1			
FH	(60°-80°)	6568.1	29.5			G3/7500
FVH	(80°-90°)	791.4	3.6			G5
BL	(0°-30°)	1195.6	5.4	B3/2500		
BM	(30°-60°)	2602.4	11.7	B3/5000		
BH	(60°-80°)	1123.9	5.0	B3/2500		G3/2500
BVH	(80°-90°)	96.6	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2.5°	2936.1	2932.7	2932.7	2932.7	2931.1	2927.8	2932.7	2931.1	2922.8	2917.8	2922.8
5°	2974.2	2975.9	2980.8	2982.5	2982.5	2987.5	3000.7	3002.4	3000.7	3004.1	3012.4
7.5°	3010.7	3019.0	3024.0	3032.3	3042.2	3050.5	3073.7	3097.0	3111.9	3123.5	3126.8
10°	3070.4	3083.7	3098.6	3120.2	3143.4	3184.9	3204.8	3228.0	3242.9	3266.1	3271.1
12.5°	3223.0	3239.6	3249.6	3282.7	3312.6	3352.4	3380.6	3387.2	3422.1	3442.0	3465.2
15°	3480.1	3505.0	3539.8	3559.8	3592.9	3627.8	3652.6	3685.8	3690.8	3717.3	3735.6
17.5°	3795.3	3830.1	3901.5	3949.6	3992.7	4027.5	4077.3	4115.4	4123.7	4153.6	4115.4
20°	4236.5	4321.1	4332.7	4429.0	4467.1	4536.8	4636.3	4654.6	4702.7	4654.6	4626.4
22.5°	4833.7	4966.4	5002.9	5095.8	5142.2	5248.4	5278.3	5376.1	5409.3	5372.8	5296.5
25°	5520.4	5726.1	5832.3	5974.9	5998.2	6215.5	6238.7	6353.1	6291.8	6203.9	6205.5
27.5°	6026.4	6376.4	6650.1	6893.9	7064.8	7310.3	7501.0	7554.1	7496.1	7381.6	7341.8
30°	6315.0	6711.4	7104.6	7441.3	7839.4	8214.3	8604.1	8798.2	8831.4	8891.1	8650.6
32.5°	6500.8	7010.0	7477.8	7894.2	8302.2	8784.9	9307.4	9806.7	10226.4	10543.2	10394.0
35°	6656.7	7285.4	7884.2	8388.5	8871.2	9397.0	9924.5	10513.4	11208.4	11614.8	11699.4
37.5°	6719.7	7487.8	8220.9	8867.9	9546.3	10138.5	10662.7	11186.9	11916.7	12641.6	12865.5
40°	6708.1	7587.3	8421.7	9234.5	10065.5	10805.3	11419.1	12039.5	12893.7	13741.4	14106.3
42.5°	6630.2	7602.2	8549.4	9478.3	10425.5	11409.1	12193.7	12908.7	13728.1	14814.6	15330.5
45°	6532.3	7550.8	8575.9	9602.7	10692.5	11830.5	12822.4	13706.5	14667.0	15740.2	16363.9
47.5°	6399.6	7469.5	8542.7	9645.8	10812.0	12100.8	13267.0	14330.2	15386.9	16622.7	17413.9
50°	6255.3	7353.4	8474.7	9614.3	10841.8	12248.5	13520.8	14731.7	15965.8	17299.5	18299.7
52.5°	6154.1	7229.0	8413.4	9549.6	10812.0	12293.3	13613.7	14947.3	16320.8	17699.2	18893.6
55°	6029.7	7063.1	8249.1	9398.7	10702.5	12268.4	13603.7	15022.0	16418.7	17853.5	19217.0
57.5°	6038.0	6986.8	8109.8	9217.9	10478.5	12037.8	13416.3	14947.3	16264.4	17754.0	19228.6
60°	6300.1	7151.0	8182.8	9254.4	10412.2	11891.8	13097.8	14466.3	15811.5	17410.6	18959.9
62.5°	6840.8	7620.5	8557.7	9619.3	10785.4	12183.8	12953.5	13666.7	14861.1	16778.6	18502.1
65°	7486.1	8189.4	9002.2	10012.4	11319.6	12658.2	12872.2	13016.5	13620.3	15549.5	17642.8
67.5°	8131.4	8760.0	9398.7	10236.4	11623.1	12794.2	12540.4	12197.1	12522.2	14121.2	15954.2
70°	8363.6	9198.0	9617.6	10193.2	11392.5	12477.4	12004.6	11140.4	11253.2	12706.3	14046.6
72.5°	8015.3	9204.6	9343.9	9557.9	10365.8	11385.9	10886.6	9775.2	9752.0	10861.7	11944.9
75°	6723.1	8396.8	8395.1	8315.5	8498.0	9078.5	8819.8	8149.6	8433.3	9307.4	9664.1
77.5°	4792.2	6552.2	6635.1	6099.4	6086.1	6348.2	6504.1	7283.7	8312.2	8803.2	8690.4
80°	3010.7	4420.7	4777.3	4115.4	3974.5	4346.0	5309.8	6444.4	7710.0	8151.3	7771.4
82.5°	1813.1	2848.1	3607.9	3233.0	3199.8	3876.6	4941.5	5382.8	5762.6	6232.1	5596.7
85°	1230.8	1897.7	2468.3	2542.9	2833.2	3533.2	3996.0	3800.3	3810.2	3687.5	3359.0
87.5°	235.5	517.5	846.0	1031.8	1144.6	1537.7	1672.1	1514.5	1599.1	1169.4	1278.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2.5°	2914.5	2914.5	2914.5	2906.2	2907.9	2896.2	2891.3	2891.3	2886.3	2886.3	2884.6
5°	3005.7	2995.8	3000.7	2999.1	2999.1	2982.5	2974.2	2974.2	2952.6	2954.3	2947.7
7.5°	3141.7	3140.1	3145.1	3135.1	3121.8	3108.6	3095.3	3088.7	3058.8	3040.6	3028.9
10°	3296.0	3294.3	3299.3	3297.7	3274.4	3249.6	3213.1	3186.5	3150.0	3121.8	3093.6
12.5°	3465.2	3463.5	3460.2	3445.3	3420.4	3380.6	3334.2	3289.4	3234.6	3198.1	3156.7
15°	3729.0	3724.0	3704.1	3682.5	3656.0	3594.6	3513.3	3448.6	3375.6	3312.6	3244.6
17.5°	4118.8	4077.3	4074.0	4025.9	3954.5	3873.3	3797.0	3689.1	3584.6	3490.1	3397.2
20°	4656.2	4560.0	4533.5	4478.7	4384.2	4299.6	4133.7	3989.4	3846.7	3717.3	3599.6
22.5°	5241.8	5172.1	5107.4	5017.8	4888.4	4765.7	4555.0	4374.2	4191.8	4025.9	3894.8
25°	6059.5	5938.5	5822.3	5679.7	5500.5	5354.6	5114.0	4931.6	4692.7	4541.8	4352.7
27.5°	7116.2	6908.8	6713.1	6590.4	6275.2	6062.9	5756.0	5520.4	5231.8	5027.8	4803.8
30°	8491.3	8250.8	7960.5	7535.9	7161.0	6739.6	6359.8	6057.9	5751.0	5465.7	5206.9
32.5°	10196.6	9771.9	9312.4	8639.0	8023.5	7423.1	6917.1	6545.6	6232.1	5877.1	5512.1
35°	11638.0	11200.1	10548.2	9692.3	8932.6	8245.8	7640.4	7132.8	6723.1	6273.5	5790.8
37.5°	12776.0	12276.7	11664.6	10755.6	9952.7	9171.4	8536.1	7889.2	7351.7	6733.0	6122.6
40°	14079.8	13578.8	12905.4	11963.2	11012.7	10165.0	9420.2	8751.8	8091.6	7336.8	6552.2
42.5°	15216.0	14854.4	14172.7	13199.0	12145.6	11201.8	10387.3	9622.6	8760.0	7915.7	6986.8
45°	16400.4	16032.2	15385.2	14366.7	13247.1	12195.4	11221.7	10398.9	9380.4	8375.2	7311.9
47.5°	17447.1	17068.9	16415.3	15403.5	14214.1	13106.1	12034.5	11039.2	9856.5	8702.0	7524.3
50°	18445.7	17982.9	17384.1	16375.5	15104.9	13920.5	12757.7	11480.5	10226.4	8930.9	7668.6
52.5°	19363.0	18774.1	18206.8	17168.4	15795.0	14557.5	13260.3	11855.3	10453.7	9111.7	7766.4
55°	19883.9	19504.0	18825.6	17805.4	16286.0	14995.4	13578.8	12119.1	10679.3	9239.4	7807.9
57.5°	20044.8	19951.9	19382.9	18173.7	16574.6	15235.9	13794.5	12328.1	10830.2	9275.9	7749.8
60°	19917.0	20086.2	19774.4	18432.4	16705.6	15307.3	13900.6	12477.4	10856.8	9159.8	7574.0
62.5°	19507.3	19892.2	19852.3	18518.7	16637.6	15217.7	13889.0	12401.1	10607.9	8798.2	7179.2
65°	18833.9	19318.2	19489.1	18198.5	16254.4	14890.9	13593.7	11921.7	9916.2	8091.6	6517.4
67.5°	17566.5	18299.7	18465.6	17150.2	15252.5	13986.9	12742.8	10926.4	8635.6	6998.4	5483.9
70°	15026.9	16309.2	16533.1	15153.0	13485.9	12374.5	11319.6	9348.9	7190.8	5613.3	4208.3
72.5°	11996.3	12802.5	13260.3	12309.8	11069.1	10262.9	9463.4	7172.6	5425.9	4142.0	2896.2
75°	9378.8	9330.7	9740.4	9108.4	8378.5	8002.0	7401.5	5004.6	3634.4	2743.6	1833.0
77.5°	8018.6	7401.5	6935.4	6490.8	6057.9	5938.5	5362.9	3105.2	2246.0	1643.9	1096.5
80°	6665.0	5538.7	4687.7	4062.4	3908.1	4143.6	3510.0	1831.3	1330.3	943.8	688.4
82.5°	4762.4	3984.4	3242.9	2846.5	2582.7	2957.6	2070.2	1016.8	721.6	565.6	456.2
85°	3087.0	2951.0	2919.5	2790.1	2469.9	2332.3	1572.5	875.8	540.8	351.7	283.7
87.5°	1187.7	1522.8	1756.7	1882.7	2035.3	1813.1	819.4	301.9	296.9	182.5	137.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2.5°	2873.0	2866.4	2864.7	2859.7	2856.4	2856.4	2848.1	2697.2	2695.5	2695.5	2693.9
5°	2934.4	2926.1	2917.8	2916.1	2909.5	2909.5	2901.2	2750.3	2750.3	2750.3	2746.9
7.5°	3017.3	3000.7	2990.8	2985.8	2975.9	2980.8	2987.5	2834.9	2836.5	2834.9	2838.2
10°	3077.0	3067.1	3055.5	3052.2	3045.5	3050.5	3060.5	2909.5	2914.5	2916.1	2919.5
12.5°	3135.1	3118.5	3103.6	3098.6	3095.3	3108.6	3120.2	2974.2	2979.2	2984.2	2984.2
15°	3206.4	3178.2	3158.3	3146.7	3140.1	3153.4	3169.9	3025.6	3027.3	3032.3	3030.6
17.5°	3327.5	3286.1	3239.6	3231.3	3209.8	3214.7	3218.0	3057.1	3050.5	3038.9	3019.0
20°	3515.0	3451.9	3388.9	3362.4	3319.2	3301.0	3264.5	3058.8	3017.3	2982.5	2952.6
22.5°	3783.7	3690.8	3622.8	3578.0	3490.1	3428.7	3329.2	3050.5	2972.5	2912.8	2866.4
25°	4218.3	4107.2	4002.6	3889.9	3752.2	3629.4	3483.4	3123.5	3002.4	2899.6	2810.0
27.5°	4641.3	4465.5	4304.5	4135.4	3941.3	3757.1	3551.5	3146.7	3009.0	2876.3	2730.4
30°	4958.1	4702.7	4458.8	4211.7	3957.9	3719.0	3486.8	3067.1	2902.9	2753.6	2599.3
32.5°	5150.5	4818.8	4501.9	4195.1	3896.5	3627.8	3367.3	2929.4	2748.6	2572.8	2408.6
35°	5333.0	4921.6	4528.5	4166.9	3825.2	3526.6	3246.2	2768.5	2552.9	2365.4	2158.1
37.5°	5558.6	5029.4	4545.1	4115.4	3720.7	3378.9	3070.4	2566.1	2350.5	2119.9	1924.2
40°	5829.0	5140.6	4528.5	4012.6	3558.1	3184.9	2858.1	2353.8	2113.3	1889.4	1696.9
42.5°	6086.1	5238.4	4485.4	3874.9	3380.6	2982.5	2664.0	2164.7	1924.2	1695.3	1504.5
45°	6276.8	5321.4	4463.8	3778.7	3244.6	2844.8	2493.2	2012.1	1758.3	1527.7	1333.7
47.5°	6409.5	5371.1	4453.8	3725.6	3150.0	2702.2	2337.2	1859.5	1592.4	1360.2	1171.1
50°	6479.2	5369.5	4429.0	3667.6	3010.7	2531.3	2176.3	1705.2	1439.8	1212.6	1040.1
52.5°	6497.5	5339.6	4375.9	3561.4	2841.5	2360.5	2003.8	1544.3	1305.5	1088.2	914.0
55°	6456.0	5266.6	4264.7	3383.9	2660.7	2179.6	1846.2	1418.3	1174.4	968.7	832.7
57.5°	6338.2	5137.3	4055.7	3140.1	2469.9	2012.1	1665.4	1265.7	1031.8	859.3	746.5
60°	6119.3	4863.6	3729.0	2851.5	2227.7	1756.7	1416.6	1066.6	880.8	751.4	660.2
62.5°	5714.5	4433.9	3269.5	2453.3	1879.4	1424.9	1131.3	851.0	711.6	627.0	570.6
65°	5062.6	3787.0	2737.0	1932.5	1428.2	1036.7	841.0	640.3	539.1	487.7	471.1
67.5°	4132.0	2924.4	1990.5	1342.0	967.1	726.5	585.6	467.8	419.7	399.8	393.1
70°	3004.1	1992.2	1288.9	847.6	638.6	507.6	442.9	376.5	350.0	345.0	345.0
72.5°	1886.0	1210.9	789.6	580.6	484.4	411.4	378.2	331.8	321.8	318.5	313.5
75°	1106.4	734.8	559.0	476.1	414.7	368.3	340.1	301.9	295.3	293.6	288.6
77.5°	705.0	529.2	451.2	406.4	374.9	333.4	308.5	268.7	267.1	265.4	263.7
80°	505.9	439.6	394.8	360.0	328.4	290.3	275.4	243.8	240.5	238.9	242.2
82.5°	383.2	363.3	345.0	318.5	275.4	247.2	235.5	214.0	215.6	207.3	205.7
85°	263.7	260.4	258.8	247.2	215.6	190.8	182.5	170.9	179.1	170.9	160.9
87.5°	129.4	127.7	117.8	139.3	129.4	102.8	92.9	102.8	114.5	111.1	102.8
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: P158954

CATALOG NUMBER: VST-F11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2.5°	2687.2	2680.6	2685.6	2682.3	2682.3	2680.6	2683.9	2678.9	2675.6	2678.9	2680.6
5°	2740.3	2732.0	2733.7	2722.1	2727.0	2715.4	2718.7	2710.5	2702.2	2698.8	2698.8
7.5°	2829.9	2821.6	2811.6	2810.0	2791.7	2785.1	2773.5	2766.9	2761.9	2750.3	2743.6
10°	2911.2	2897.9	2886.3	2884.6	2866.4	2849.8	2834.9	2821.6	2813.3	2796.7	2788.4
12.5°	2977.5	2964.2	2946.0	2936.1	2917.8	2897.9	2887.9	2868.0	2856.4	2838.2	2823.3
15°	3015.7	2992.4	2965.9	2947.7	2921.1	2899.6	2884.6	2869.7	2858.1	2834.9	2813.3
17.5°	2997.4	2959.3	2922.8	2889.6	2853.1	2833.2	2811.6	2793.4	2790.1	2763.5	2730.4
20°	2921.1	2876.3	2828.2	2783.4	2735.3	2707.1	2680.6	2652.4	2644.1	2612.6	2569.5
22.5°	2828.2	2776.8	2722.1	2667.3	2606.0	2566.1	2526.3	2491.5	2463.3	2416.9	2355.5
25°	2733.7	2657.4	2577.8	2508.1	2436.8	2387.0	2345.5	2307.4	2274.2	2199.5	2136.5
27.5°	2609.3	2489.8	2408.6	2328.9	2242.7	2178.0	2131.5	2078.5	2042.0	1955.7	1889.4
30°	2450.0	2330.6	2214.5	2134.9	2048.6	1978.9	1919.2	1842.9	1789.8	1726.8	1665.4
32.5°	2249.3	2129.9	2012.1	1922.5	1851.2	1764.9	1690.3	1617.3	1555.9	1494.6	1446.5
35°	2005.5	1889.4	1778.2	1688.6	1609.0	1541.0	1469.7	1406.7	1337.0	1270.6	1242.4
37.5°	1748.4	1624.0	1501.2	1423.2	1360.2	1312.1	1245.7	1194.3	1131.3	1091.5	1058.3
40°	1524.4	1391.7	1275.6	1209.3	1159.5	1104.8	1050.0	1010.2	965.4	925.6	900.7
42.5°	1335.3	1210.9	1111.4	1055.0	995.3	935.6	894.1	860.9	832.7	802.9	773.0
45°	1161.1	1041.7	958.8	889.1	839.3	791.2	763.0	748.1	731.5	713.3	693.4
47.5°	1015.2	912.3	831.1	766.4	714.9	681.8	668.5	663.5	656.9	642.0	632.0
50°	904.0	819.4	736.5	678.4	635.3	618.7	603.8	598.8	590.5	585.6	578.9
52.5°	811.1	721.6	651.9	598.8	572.3	565.6	559.0	552.4	550.7	547.4	544.1
55°	734.8	656.9	592.2	552.4	539.1	534.1	532.5	525.8	524.2	524.2	519.2
57.5°	666.8	600.5	542.4	517.5	509.2	504.3	501.0	497.6	497.6	501.0	499.3
60°	597.2	540.8	505.9	492.7	487.7	479.4	471.1	467.8	469.4	477.7	477.7
62.5°	529.2	487.7	466.1	461.1	456.2	449.5	439.6	436.3	439.6	449.5	454.5
65°	454.5	436.3	429.6	426.3	423.0	418.0	411.4	408.1	409.7	414.7	421.3
67.5°	386.5	384.8	384.8	386.5	384.8	383.2	379.9	374.9	373.2	373.2	376.5
70°	345.0	345.0	350.0	350.0	348.3	348.3	343.4	338.4	335.1	331.8	333.4
72.5°	313.5	313.5	315.2	316.8	315.2	315.2	308.5	305.2	296.9	295.3	291.9
75°	287.0	283.7	283.7	282.0	280.3	282.0	275.4	267.1	263.7	262.1	258.8
77.5°	260.4	253.8	250.5	247.2	248.8	247.2	242.2	237.2	232.2	230.6	228.9
80°	230.6	220.6	215.6	207.3	212.3	214.0	210.7	205.7	204.0	202.4	200.7
82.5°	190.8	180.8	174.2	169.2	165.9	169.2	174.2	185.8	182.5	180.8	177.5
85°	149.3	132.7	124.4	126.1	117.8	119.4	134.4	141.0	141.0	144.3	141.0
87.5°	84.6	81.3	61.4	56.4	59.7	71.3	79.6	87.9	87.9	82.9	92.9
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: VST-F11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2.5°	2680.6	2683.9	2685.6	2692.2	2695.5	2697.2	2698.8	2702.2	2703.8	2702.2	2710.5
5°	2693.9	2693.9	2690.6	2695.5	2697.2	2697.2	2693.9	2697.2	2697.2	2697.2	2705.5
7.5°	2728.7	2718.7	2713.8	2707.1	2702.2	2695.5	2687.2	2687.2	2685.6	2687.2	2692.2
10°	2765.2	2750.3	2732.0	2715.4	2700.5	2688.9	2674.0	2669.0	2667.3	2665.7	2678.9
12.5°	2793.4	2766.9	2738.7	2710.5	2680.6	2660.7	2635.8	2620.9	2619.2	2619.2	2635.8
15°	2773.5	2730.4	2675.6	2625.9	2599.3	2571.1	2542.9	2524.7	2523.0	2526.3	2536.3
17.5°	2674.0	2604.3	2556.2	2508.1	2473.2	2450.0	2431.8	2428.5	2435.1	2428.5	2441.7
20°	2504.8	2430.1	2396.9	2358.8	2345.5	2328.9	2302.4	2279.2	2279.2	2249.3	2257.6
22.5°	2285.8	2244.3	2201.2	2171.4	2161.4	2133.2	2105.0	2073.5	2070.2	2033.7	2028.7
25°	2056.9	2015.4	1980.6	1974.0	1944.1	1905.9	1879.4	1842.9	1834.6	1798.1	1793.1
27.5°	1823.0	1789.8	1755.0	1735.1	1718.5	1677.0	1653.8	1610.7	1594.1	1554.3	1549.3
30°	1600.7	1577.5	1536.0	1519.4	1487.9	1439.8	1390.1	1363.5	1350.3	1308.8	1295.5
32.5°	1391.7	1355.2	1323.7	1303.8	1264.0	1209.3	1164.5	1126.3	1101.4	1051.7	1038.4
35°	1192.7	1156.2	1141.2	1089.8	1055.0	1018.5	957.1	933.9	889.1	851.0	837.7
37.5°	1016.8	982.0	962.1	919.0	884.1	847.6	811.1	781.3	759.7	751.4	751.4
40°	865.9	847.6	822.8	791.2	768.0	741.5	721.6	711.6	710.0	713.3	721.6
42.5°	758.1	738.2	721.6	705.0	688.4	685.1	680.1	686.7	695.0	703.3	711.6
45°	676.8	660.2	650.2	643.6	642.0	646.9	656.9	666.8	681.8	691.7	698.3
47.5°	618.7	605.5	602.1	600.5	608.8	623.7	637.0	651.9	663.5	673.5	680.1
50°	569.0	557.4	555.7	554.0	565.6	578.9	590.5	610.4	618.7	625.4	630.3
52.5°	534.1	524.2	519.2	520.9	532.5	544.1	560.7	575.6	587.2	592.2	597.2
55°	505.9	502.6	491.0	496.0	507.6	522.5	539.1	555.7	567.3	575.6	583.9
57.5°	484.4	476.1	467.8	476.1	487.7	502.6	522.5	537.4	552.4	564.0	572.3
60°	461.1	454.5	447.9	456.2	467.8	482.7	497.6	517.5	535.8	547.4	555.7
62.5°	441.2	436.3	429.6	431.3	436.3	446.2	454.5	472.8	489.3	504.3	514.2
65°	413.0	411.4	401.4	403.1	406.4	416.4	423.0	439.6	456.2	469.4	477.7
67.5°	371.6	368.3	368.3	373.2	374.9	379.9	384.8	401.4	414.7	424.6	434.6
70°	330.1	328.4	328.4	331.8	330.1	335.1	341.7	356.6	373.2	383.2	393.1
72.5°	290.3	290.3	288.6	291.9	291.9	293.6	301.9	315.2	330.1	338.4	345.0
75°	255.5	253.8	253.8	253.8	255.5	255.5	263.7	275.4	290.3	295.3	305.2
77.5°	223.9	223.9	223.9	223.9	225.6	223.9	228.9	237.2	242.2	250.5	250.5
80°	197.4	195.7	197.4	199.1	199.1	197.4	197.4	199.1	200.7	200.7	200.7
82.5°	174.2	169.2	172.5	180.8	180.8	180.8	179.1	167.5	159.2	159.2	162.6
85°	139.3	139.3	141.0	152.6	154.3	147.6	154.3	137.7	121.1	116.1	119.4
87.5°	86.3	68.0	82.9	94.6	94.6	89.6	99.5	92.9	78.0	63.0	59.7
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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CATALOG NUMBER: VST-F11-LED-E-U-SLL-7030

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	0°
2.5°	2717.1	2718.7	2728.7	2733.7	2733.7	2740.3	2743.6	2753.6	2751.9	2751.9	2755.2	2.5°
5°	2713.8	2718.7	2728.7	2735.3	2738.7	2746.9	2753.6	2765.2	2763.5	2766.9	2768.5	5°
7.5°	2702.2	2715.4	2725.4	2738.7	2750.3	2756.9	2765.2	2775.1	2771.8	2773.5	2771.8	7.5°
10°	2692.2	2705.5	2725.4	2743.6	2760.2	2770.2	2775.1	2786.8	2785.1	2788.4	2788.4	10°
12.5°	2652.4	2675.6	2700.5	2728.7	2753.6	2780.1	2796.7	2821.6	2833.2	2848.1	2864.7	12.5°
15°	2551.2	2577.8	2617.6	2649.1	2697.2	2733.7	2781.8	2829.9	2873.0	2914.5	2962.6	15°
17.5°	2451.7	2463.3	2494.8	2537.9	2581.1	2635.8	2693.9	2780.1	2858.1	2942.7	3035.6	17.5°
20°	2267.6	2287.5	2309.0	2360.5	2411.9	2489.8	2561.2	2674.0	2788.4	2921.1	3063.8	20°
22.5°	2040.3	2060.2	2083.4	2141.5	2204.5	2284.1	2370.4	2496.5	2649.1	2821.6	3012.4	22.5°
25°	1794.8	1806.4	1824.7	1882.7	1920.9	2025.4	2129.9	2260.9	2426.8	2649.1	2871.4	25°
27.5°	1524.4	1546.0	1560.9	1587.5	1675.4	1764.9	1874.4	2015.4	2216.1	2443.4	2712.1	27.5°
30°	1265.7	1283.9	1275.6	1332.0	1390.1	1484.6	1602.4	1758.3	1950.7	2221.1	2531.3	30°
32.5°	1011.9	1025.1	1020.2	1060.0	1118.0	1212.6	1323.7	1492.9	1696.9	1985.6	2322.3	32.5°
35°	834.4	837.7	855.9	874.2	923.9	1000.2	1094.8	1242.4	1451.4	1716.8	2073.5	35°
37.5°	751.4	758.1	769.7	794.6	831.1	885.8	963.8	1078.2	1257.4	1491.2	1809.7	37.5°
40°	726.5	731.5	738.2	754.7	789.6	837.7	907.4	1003.6	1134.6	1332.0	1590.8	40°
42.5°	714.9	714.9	714.9	724.9	751.4	802.9	882.5	977.0	1091.5	1240.8	1449.8	42.5°
45°	698.3	698.3	696.7	701.7	719.9	771.3	857.6	963.8	1086.5	1229.2	1410.0	45°
47.5°	680.1	678.4	673.5	673.5	685.1	736.5	826.1	940.5	1074.9	1239.1	1433.2	47.5°
50°	630.3	630.3	630.3	635.3	645.3	691.7	787.9	909.0	1063.3	1245.7	1469.7	50°
52.5°	602.1	603.8	608.8	608.8	618.7	666.8	768.0	902.4	1069.9	1270.6	1516.1	52.5°
55°	588.9	593.8	598.8	598.8	607.1	656.9	761.4	907.4	1094.8	1322.1	1595.8	55°
57.5°	577.3	582.2	585.6	585.6	592.2	635.3	743.1	899.1	1109.7	1371.8	1693.6	57.5°
60°	555.7	559.0	560.7	560.7	562.3	598.8	701.7	859.3	1076.6	1368.5	1746.7	60°
62.5°	515.9	522.5	524.2	525.8	525.8	560.7	648.6	794.6	1005.2	1318.7	1731.8	62.5°
65°	486.0	489.3	494.3	497.6	504.3	527.5	597.2	716.6	912.3	1219.2	1648.8	65°
67.5°	439.6	444.6	449.5	456.2	462.8	477.7	532.5	628.7	786.3	1050.0	1463.0	67.5°
70°	398.1	399.8	404.7	413.0	414.7	423.0	462.8	529.2	643.6	842.7	1177.7	70°
72.5°	346.7	350.0	356.6	366.6	366.6	373.2	396.4	431.3	504.3	643.6	869.2	72.5°
75°	301.9	305.2	310.2	310.2	301.9	303.6	320.1	345.0	399.8	484.4	633.7	75°
77.5°	250.5	257.1	262.1	252.1	248.8	253.8	262.1	280.3	320.1	384.8	476.1	77.5°
80°	207.3	210.7	212.3	214.0	210.7	215.6	222.3	233.9	260.4	310.2	376.5	80°
82.5°	165.9	169.2	174.2	180.8	180.8	199.1	200.7	200.7	215.6	247.2	295.3	82.5°
85°	122.8	129.4	136.0	144.3	146.0	155.9	150.9	149.3	154.3	184.1	204.0	85°
87.5°	63.0	68.0	71.3	78.0	69.7	73.0	73.0	68.0	59.7	74.6	82.9	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
2771.8	2771.8	2771.8	2771.8	2771.8	2771.8	2771.8
2758.6	2755.2	2758.6	2758.6	2763.5	2760.2	2936.1
2771.8	2768.5	2771.8	2775.1	2780.1	2780.1	2974.2
2773.5	2773.5	2770.2	2778.5	2785.1	2791.7	3010.7
2793.4	2793.4	2796.7	2798.4	2813.3	2829.9	3070.4
2874.7	2883.0	2897.9	2902.9	2929.4	2947.7	3223.0
2999.1	3045.5	3075.4	3085.3	3108.6	3143.4	3480.1
3125.2	3203.1	3284.4	3334.2	3364.0	3405.5	3795.3
3219.7	3365.7	3505.0	3629.4	3700.8	3782.0	4236.5
3228.0	3460.2	3695.8	3926.3	4117.1	4268.1	4833.7
3148.4	3453.6	3778.7	4132.0	4460.5	4732.5	5520.4
3047.2	3422.1	3836.8	4288.0	4719.2	5120.7	6026.4
2919.5	3369.0	3846.7	4354.3	4860.2	5342.9	6315.0
2725.4	3211.4	3727.3	4288.0	4875.2	5462.4	6500.8
2476.6	2972.5	3501.7	4140.3	4805.5	5510.5	6656.7
2222.8	2712.1	3281.1	3942.9	4694.4	5502.2	6719.7
1954.0	2440.1	3022.3	3732.3	4543.4	5425.9	6708.1
1771.6	2214.5	2785.1	3518.3	4375.9	5324.7	6630.2
1665.4	2053.6	2597.7	3322.5	4223.3	5203.6	6532.3
1663.8	2005.5	2498.1	3183.2	4069.0	5069.2	6399.6
1721.8	2035.3	2486.5	3123.5	3984.4	4971.4	6255.3
1789.8	2118.3	2547.9	3145.1	3982.7	4928.3	6154.1
1897.7	2259.3	2682.3	3237.9	4025.9	4921.6	6029.7
2035.3	2450.0	2924.4	3466.9	4193.4	5052.7	6038.0
2176.3	2674.0	3241.3	3858.3	4523.5	5357.9	6300.1
2227.7	2846.5	3563.1	4317.8	5017.8	5815.7	6840.8
2183.0	2886.3	3758.8	4674.5	5498.9	6351.5	7486.1
2017.1	2725.4	3679.2	4775.6	5775.9	6731.4	8131.4
1660.4	2325.6	3317.6	4548.4	5754.3	6809.3	8363.6
1217.5	1803.1	2697.2	3865.0	5115.7	6321.6	8015.3
879.2	1275.6	1947.4	2911.2	4044.1	5090.8	6723.1
630.3	884.1	1264.0	1912.6	2755.2	3544.8	4792.2
452.8	600.5	787.9	1147.9	1678.7	2176.3	3010.7
333.4	411.4	517.5	713.3	988.6	1267.3	1813.1
227.3	242.2	311.9	421.3	648.6	932.2	1230.8
86.3	97.9	114.5	172.5	290.3	333.4	235.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)