

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: INVUE

Report Number: P95381

Luminaire Tested: **VFS-K-B40-7-LED-E1-MST**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95381
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22791)
Test Lab: INNOVATION CENTER
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VFS-K-B40-7-LED-E1-MST
Description: ARCHITECTURAL FLOOD LUMINAIRE
MEDIUM SYMMETRIC RECTANGULAR DISTRIBUTION
WITH 40 LED'S, 700mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	6H x 5V
Luminaire Lumens:	6590.1 lumens	Max Intensity:	5856.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	70.3 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	85.3°H x 47.1°V	Field Angle (10%):	109°H x 79.9°V
Beam Lumens:	4379.6 lumens	Field Lumens:	6292.5 lumens
Beam Efficiency:	66.5%	Field Efficiency:	95.5%

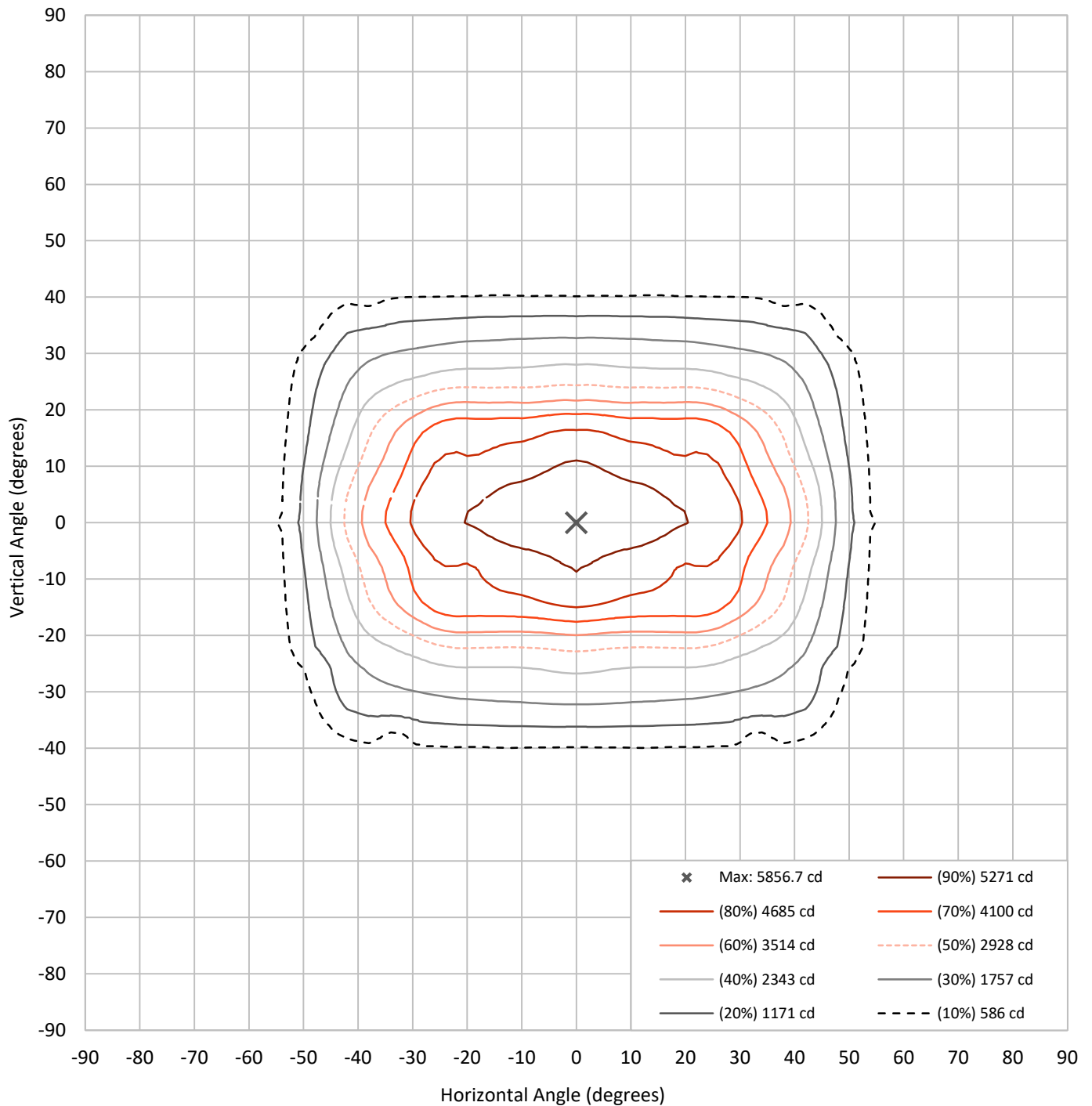
Input Watts (W): 93.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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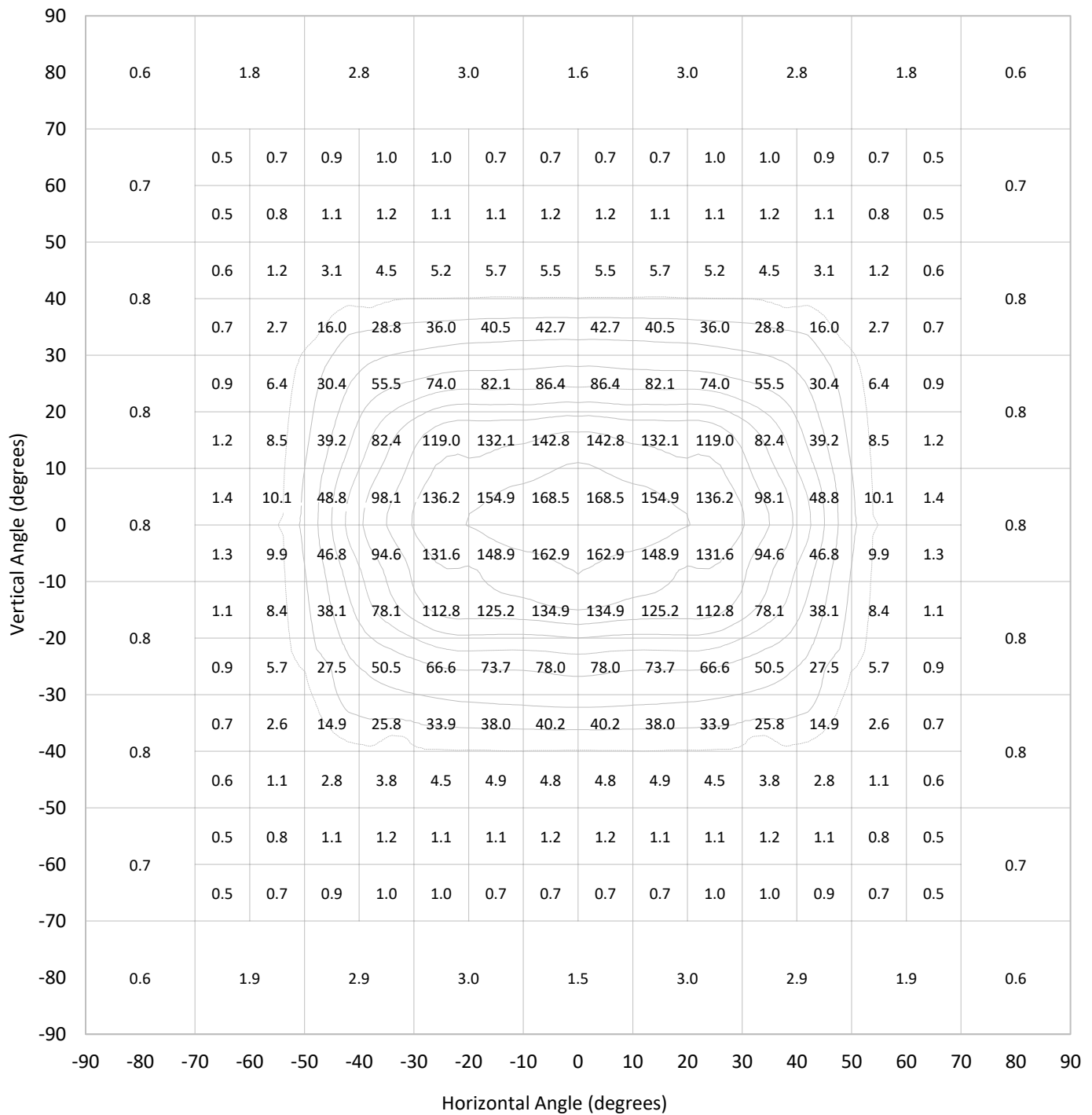
Iso-Candela Plot





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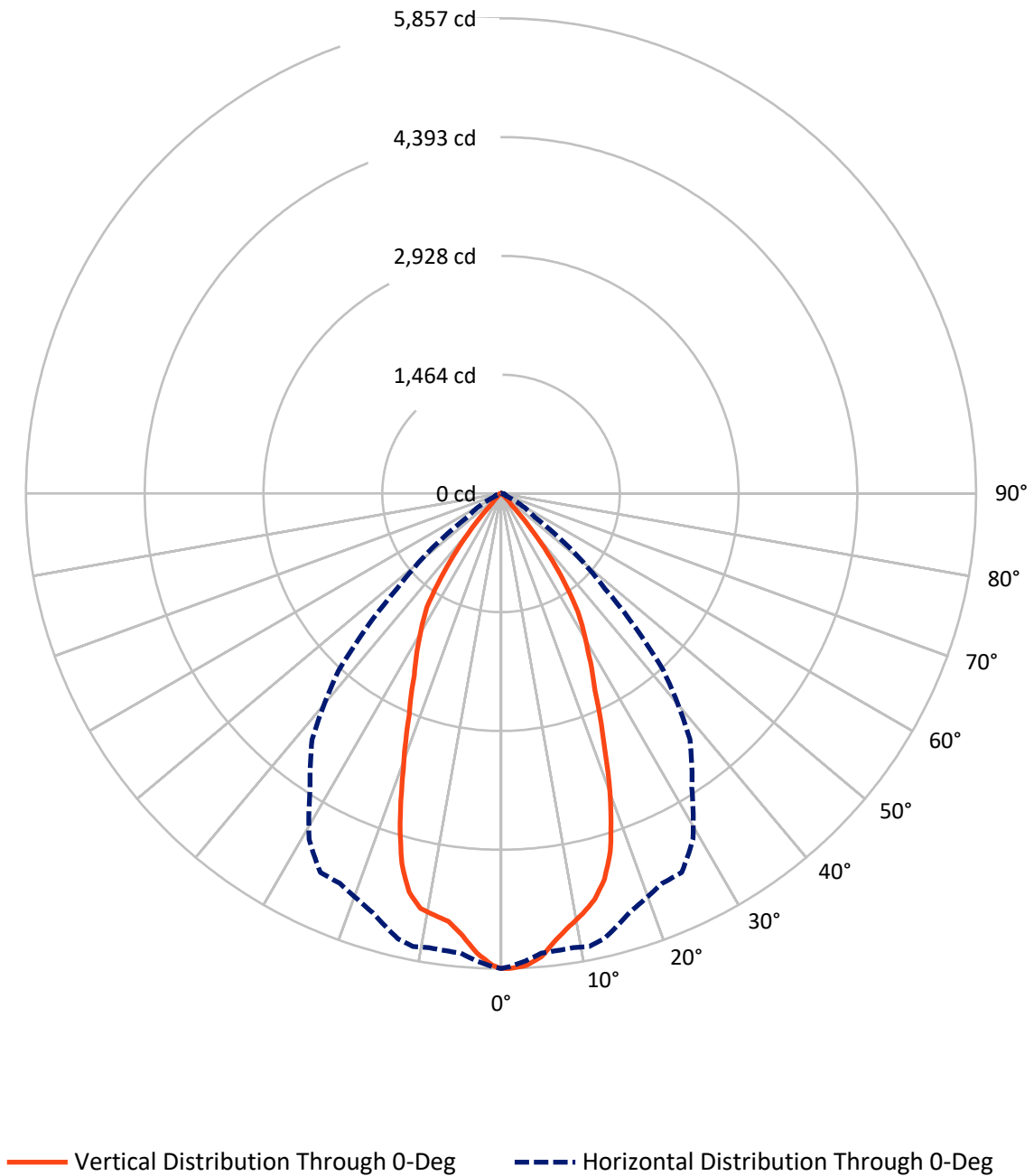
Lumen Table



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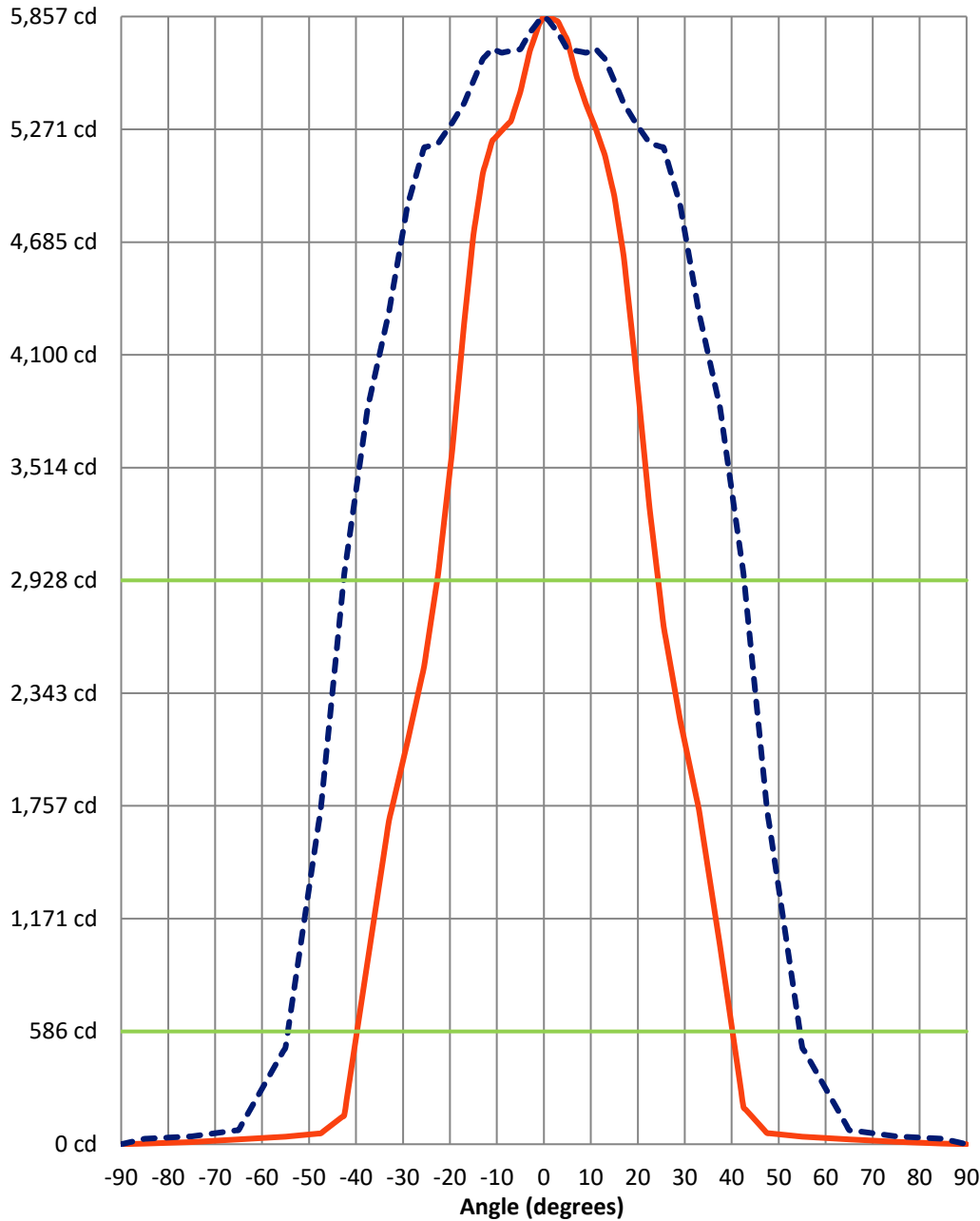
Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 85.3°
 V Angle: 47.1°
 Lumens: 4379.6
 Efficiency: 66.5%

Field:
 H Angle: 109°
 V Angle: 79.9°
 Lumens: 6292.5
 Efficiency: 95.5%

Spill:
 Lumens: 297.6
 Efficiency: 4.5%

— Vertical Distribution through 0-Deg
 - - - Horizontal Distribution through 0-Deg



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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	1°	3°	5°	7°	9°	11°	13°	15°	17°	19.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.1	4.7	7.8	15.7	25.0	29.7	31.3	31.3	31.3	31.3	32.9
75°	12.5	12.5	12.5	11.0	11.0	12.5	14.1	18.8	23.5	28.2	31.3
65°	25.0	25.0	25.0	23.5	23.5	23.5	21.9	21.9	20.4	23.5	26.6
55°	39.1	39.1	39.1	37.6	37.6	37.6	37.6	36.0	36.0	34.4	34.4
47.5°	57.9	57.9	57.9	57.9	56.4	56.4	56.4	56.4	54.8	54.8	54.8
42.5°	192.6	206.7	194.1	205.1	200.4	209.8	230.1	242.7	252.1	233.3	205.1
37.5°	1030.1	1055.2	1039.5	1055.2	1039.5	1028.6	1039.5	1022.3	1025.4	1025.4	1006.6
33°	1739.3	1758.1	1748.7	1753.4	1737.8	1728.4	1733.1	1714.3	1692.4	1692.4	1675.1
29°	2204.3	2221.5	2213.7	2194.9	2171.4	2152.6	2146.4	2132.3	2102.5	2102.5	2097.8
25.5°	2689.6	2697.4	2700.6	2667.7	2636.4	2606.6	2611.3	2612.9	2586.3	2601.9	2609.8
22.5°	3304.9	3336.2	3326.8	3275.1	3254.8	3217.2	3239.1	3251.6	3232.8	3239.1	3262.6
19.5°	4050.1	4079.8	4061.0	4010.9	3968.7	3907.6	3927.9	3948.3	3926.4	3913.9	3942.0
17°	4610.5	4632.4	4615.2	4547.9	4475.9	4407.0	4392.9	4392.9	4366.3	4335.0	4350.6
15°	4923.6	4937.7	4904.8	4809.3	4743.6	4648.1	4627.7	4610.5	4574.5	4529.1	4527.6
13°	5135.0	5136.5	5094.3	5005.0	4922.1	4818.7	4790.6	4760.8	4710.7	4649.7	4627.7
11°	5277.4	5277.4	5238.3	5150.6	5067.7	4970.6	4933.0	4897.0	4834.4	4753.0	4710.7
9°	5399.6	5399.6	5366.7	5290.0	5222.7	5119.3	5086.5	5039.5	4967.5	4868.8	4801.5
7°	5543.6	5548.3	5518.5	5452.8	5412.1	5315.0	5283.7	5219.5	5125.6	5011.3	4923.6
5°	5733.0	5733.0	5692.3	5626.6	5599.9	5527.9	5507.6	5438.7	5327.5	5192.9	5088.0
3°	5830.1	5819.1	5761.2	5684.5	5670.4	5639.1	5646.9	5589.0	5474.7	5335.4	5227.3
1°	5856.7	5845.7	5778.4	5684.5	5682.9	5670.4	5695.4	5645.3	5535.8	5416.8	5335.4
0°	5856.7	5836.3	5772.2	5687.6	5678.2	5668.8	5689.2	5636.0	5521.7	5405.8	5305.6
-1°	5817.6	5800.3	5740.8	5665.7	5643.8	5632.8	5645.3	5581.2	5468.4	5340.1	5210.1
-3°	5676.7	5654.7	5607.8	5559.2	5504.5	5459.0	5455.9	5371.4	5263.4	5156.9	5025.4
-5°	5466.9	5448.1	5407.4	5357.3	5286.8	5222.7	5191.3	5103.7	5017.6	4926.8	4809.3
-7°	5315.0	5300.9	5249.3	5186.6	5109.9	5033.2	4980.0	4914.2	4843.8	4757.7	4662.2
-9°	5263.4	5252.4	5192.9	5117.8	5028.5	4931.5	4886.1	4834.4	4774.9	4696.6	4626.2
-11°	5210.1	5194.5	5135.0	5048.9	4954.9	4864.1	4817.2	4773.3	4723.2	4660.6	4610.5
-13°	5042.6	5014.4	4967.5	4876.7	4787.4	4715.4	4671.6	4637.1	4607.4	4565.1	4538.5
-15°	4723.2	4713.9	4685.7	4593.3	4518.2	4461.8	4425.8	4403.9	4402.3	4372.6	4367.9
-17°	4256.7	4212.9	4209.7	4148.7	4079.8	4065.7	4045.4	4029.7	4031.3	4031.3	4037.5
-19.5°	3607.0	3596.1	3563.2	3513.1	3480.2	3469.2	3459.9	3463.0	3480.2	3481.8	3495.9
-22.5°	2963.6	2955.7	2944.8	2886.9	2872.8	2852.4	2836.8	2839.9	2852.4	2852.4	2869.6
-25.5°	2481.4	2475.1	2459.5	2412.5	2385.9	2356.1	2329.5	2331.1	2334.2	2334.2	2342.1
-29°	2094.7	2091.6	2090.0	2069.6	2047.7	2033.6	2016.4	2010.2	1996.1	1986.7	1975.7
-33°	1678.3	1675.1	1681.4	1668.9	1662.6	1656.3	1636.0	1643.8	1626.6	1612.5	1600.0
-37.5°	955.0	953.4	970.6	969.1	956.5	942.5	950.3	947.2	940.9	934.6	928.4
-42.5°	150.3	148.7	148.7	162.8	162.8	183.2	200.4	202.0	192.6	170.6	172.2
-47.5°	56.4	56.4	56.4	56.4	54.8	54.8	53.2	53.2	53.2	51.7	51.7
-55°	39.1	39.1	39.1	37.6	37.6	37.6	36.0	36.0	36.0	34.4	34.4
-65°	25.0	25.0	25.0	23.5	23.5	21.9	21.9	20.4	20.4	21.9	26.6
-75°	11.0	11.0	11.0	11.0	11.0	11.0	12.5	17.2	23.5	28.2	31.3
-85°	3.1	4.7	7.8	15.7	26.6	31.3	32.9	31.3	32.9	32.9	32.9
-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):

	22.5°	25.5°	29°	33°	37.5°	42.5°	47.5°	55°	65°	75°	85°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	34.4	34.4	34.4
75°	34.4	36.0	36.0	36.0	36.0	36.0	36.0	34.4	34.4	34.4	34.4
65°	31.3	36.0	39.1	40.7	42.3	43.8	40.7	39.1	36.0	36.0	34.4
55°	36.0	39.1	42.3	48.5	50.1	51.7	50.1	45.4	39.1	37.6	34.4
47.5°	53.2	54.8	56.4	61.1	64.2	65.8	64.2	53.2	42.3	39.1	34.4
42.5°	242.7	220.7	242.7	236.4	225.4	211.3	161.3	59.5	43.8	39.1	34.4
37.5°	981.6	964.4	942.5	914.3	659.1	723.3	325.6	65.8	45.4	39.1	34.4
33°	1640.7	1601.6	1557.7	1507.6	1427.8	1227.4	593.3	97.1	47.0	39.1	34.4
29°	2072.8	2024.2	1953.8	1884.9	1759.7	1501.4	1000.4	165.9	48.5	39.1	32.9
25.5°	2592.5	2517.4	2371.8	2234.0	2032.1	1667.3	1136.6	217.6	50.1	39.1	32.9
22.5°	3253.2	3142.0	2905.6	2641.1	2320.1	1800.4	1229.0	256.7	51.7	39.1	31.3
19.5°	3938.9	3798.0	3489.6	3106.0	2639.5	1933.4	1302.5	289.6	53.2	39.1	31.3
17°	4366.3	4244.2	3920.1	3456.7	2868.1	2063.4	1362.0	313.1	53.2	39.1	31.3
15°	4565.1	4461.8	4123.6	3633.6	3013.7	2169.8	1413.7	330.3	53.2	39.1	29.7
13°	4679.4	4602.7	4245.8	3746.3	3138.9	2287.3	1468.5	344.4	54.8	39.1	29.7
11°	4760.8	4718.5	4355.3	3835.6	3267.3	2414.1	1535.8	356.9	56.4	39.1	29.7
9°	4837.5	4818.7	4474.3	3942.0	3423.8	2573.8	1603.1	366.3	59.5	39.1	29.7
7°	4931.5	4918.9	4596.4	4050.1	3561.6	2724.0	1664.2	374.2	62.6	39.1	28.2
5°	5067.7	5045.7	4735.8	4175.3	3680.6	2836.8	1708.0	380.4	68.9	40.7	28.2
3°	5166.3	5141.2	4840.7	4281.8	3782.4	2926.0	1731.5	383.6	72.0	40.7	28.2
1°	5207.0	5183.5	4887.6	4331.9	3832.5	2966.7	1744.0	386.7	73.6	40.7	28.2
0°	5199.2	5175.7	4879.8	4320.9	3826.2	2962.0	1742.4	504.1	73.6	40.7	28.2
-1°	5160.0	5138.1	4842.2	4281.8	3794.9	2932.3	1731.5	386.7	72.0	40.7	28.2
-3°	5014.4	4997.2	4699.8	4147.1	3682.2	2830.5	1695.5	383.6	67.3	39.1	28.2
-5°	4821.9	4818.7	4516.6	3979.6	3522.5	2675.5	1637.6	380.4	62.6	39.1	28.2
-7°	4691.9	4691.9	4374.1	3848.1	3348.7	2514.3	1567.1	374.2	59.5	39.1	28.2
-9°	4663.8	4646.5	4302.1	3787.0	3237.5	2404.7	1510.7	366.3	56.4	37.6	28.2
-11°	4657.5	4616.8	4253.6	3741.6	3156.1	2318.6	1468.5	355.4	54.8	37.6	28.2
-13°	4582.3	4505.6	4139.3	3633.6	3049.7	2223.1	1427.8	344.4	53.2	37.6	29.7
-15°	4400.7	4286.5	3924.8	3448.9	2911.9	2119.7	1387.1	328.8	51.7	36.0	29.7
-17°	4051.6	3920.1	3571.0	3151.4	2706.8	2011.7	1341.7	311.5	51.7	37.6	29.7
-19.5°	3503.7	3383.1	3095.1	2761.6	2418.8	1884.9	1279.0	288.1	50.1	37.6	29.7
-22.5°	2869.6	2763.2	2544.0	2321.7	2111.9	1742.4	1197.6	255.2	50.1	37.6	29.7
-25.5°	2332.7	2259.1	2133.8	2005.5	1850.5	1595.3	767.1	216.0	48.5	37.6	31.3
-29°	1953.8	1910.0	1847.3	1770.6	1661.0	1449.7	698.2	164.4	48.5	39.1	32.9
-33°	1581.2	1535.8	1488.8	1435.6	1354.2	1185.1	558.9	95.5	47.0	39.1	32.9
-37.5°	912.7	893.9	865.7	839.8	781.2	652.8	302.1	65.8	45.4	39.1	34.4
-42.5°	208.2	170.6	202.0	189.4	192.6	178.5	134.6	57.9	43.8	39.1	34.4
-47.5°	51.7	51.7	53.2	57.9	61.1	62.6	61.1	53.2	42.3	39.1	34.4
-55°	36.0	37.6	42.3	48.5	50.1	51.7	50.1	45.4	39.1	37.6	34.4
-65°	31.3	36.0	39.1	40.7	42.3	43.8	42.3	39.1	36.0	36.0	34.4
-75°	34.4	36.0	36.0	36.0	36.0	36.0	36.0	36.0	34.4	34.4	34.4
-85°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
-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°
90°	0.0
85°	0.0
75°	0.0
65°	0.0
55°	0.0
47.5°	0.0
42.5°	0.0
37.5°	0.0
33°	0.0
29°	0.0
25.5°	0.0
22.5°	0.0
19.5°	0.0
17°	0.0
15°	0.0
13°	0.0
11°	0.0
9°	0.0
7°	0.0
5°	0.0
3°	0.0
1°	0.0
0°	0.0
-1°	0.0
-3°	0.0
-5°	0.0
-7°	0.0
-9°	0.0
-11°	0.0
-13°	0.0
-15°	0.0
-17°	0.0
-19.5°	0.0
-22.5°	0.0
-25.5°	0.0
-29°	0.0
-33°	0.0
-37.5°	0.0
-42.5°	0.0
-47.5°	0.0
-55°	0.0
-65°	0.0
-75°	0.0
-85°	0.0
-90°	0.0

(END OF REPORT)