

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: P95380

Luminaire Tested: **VFS-K-B40-5-LED-E1-MST**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95380
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-B40-5-LED-E1-MST
Description: ARCHITECTURAL FLOOD LUMINAIRE
MEDIUM SYMMETRIC RECTANGULAR DISTRIBUTION
WITH 40 LED'S, 525mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

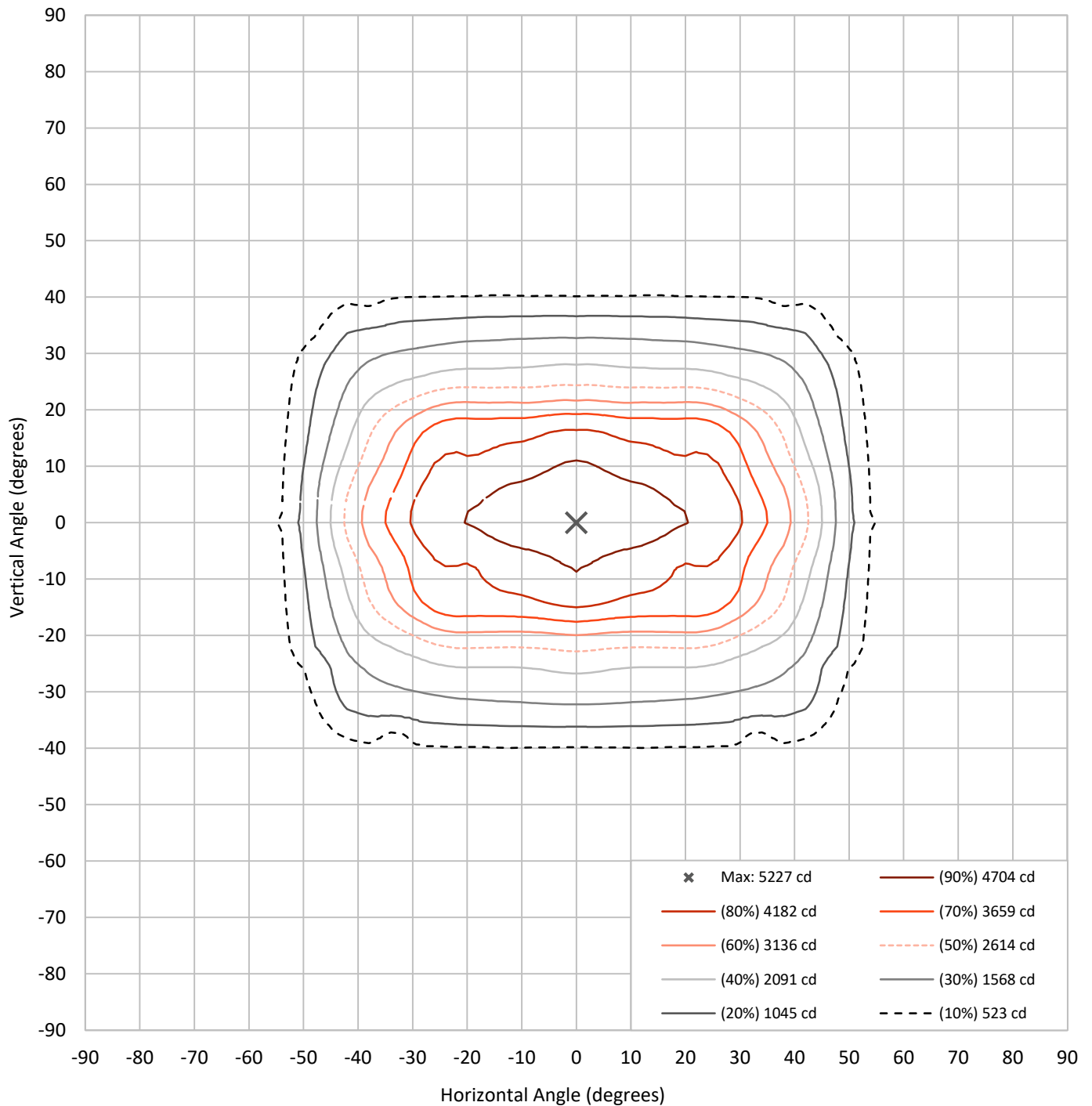
Lumens per Lamp:	N/A	NEMA Type:	6H x 5V
Luminaire Lumens:	5881.5 lumens	Max Intensity:	5227 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	88.8 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	85.3°H x 47.1°V	Field Angle (10%):	109°H x 79.9°V
Beam Lumens:	3908.7 lumens	Field Lumens:	5616 lumens
Beam Efficiency:	66.5%	Field Efficiency:	95.5%
Input Watts (W):	66.2		
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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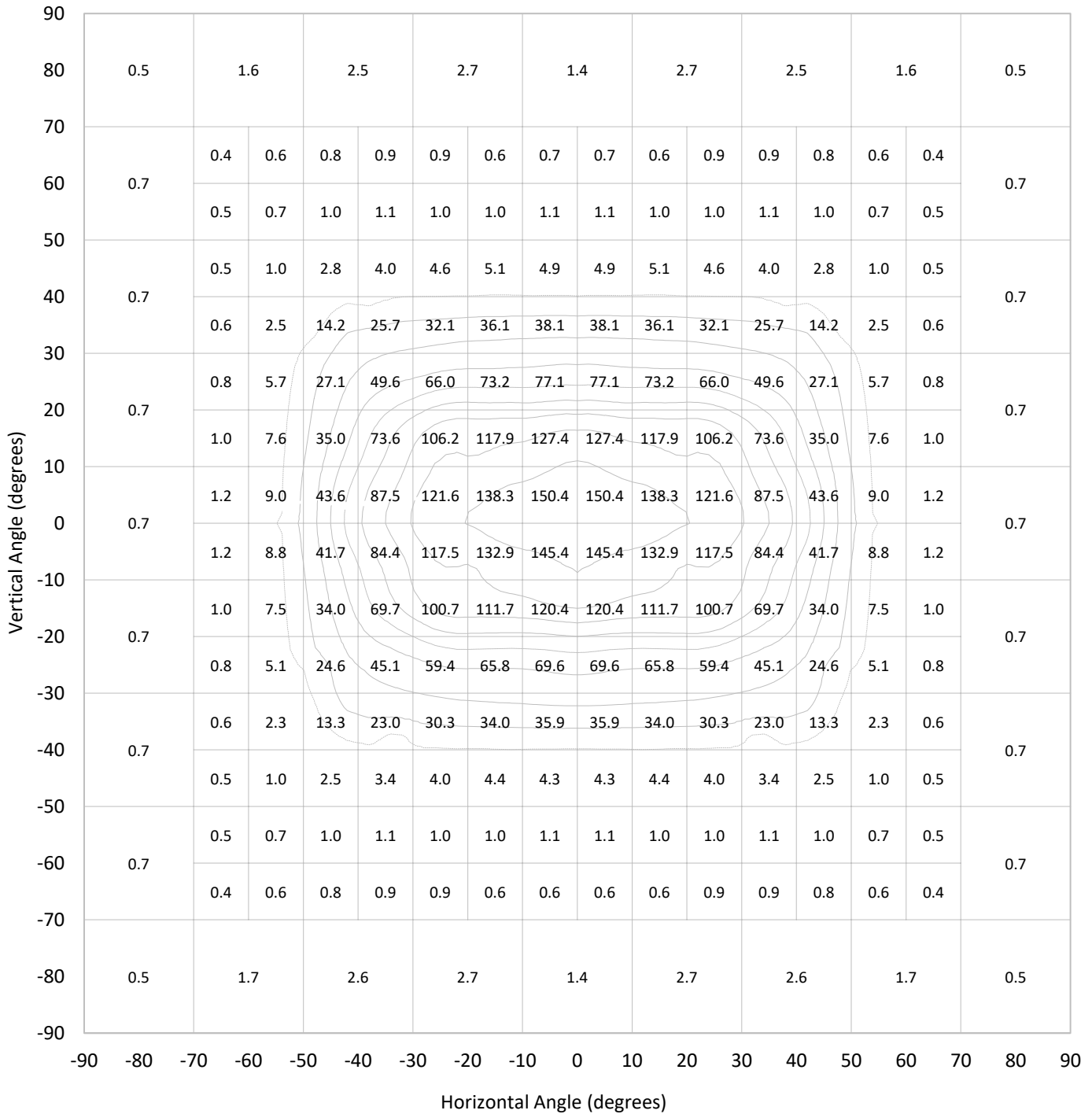
Iso-Candela Plot





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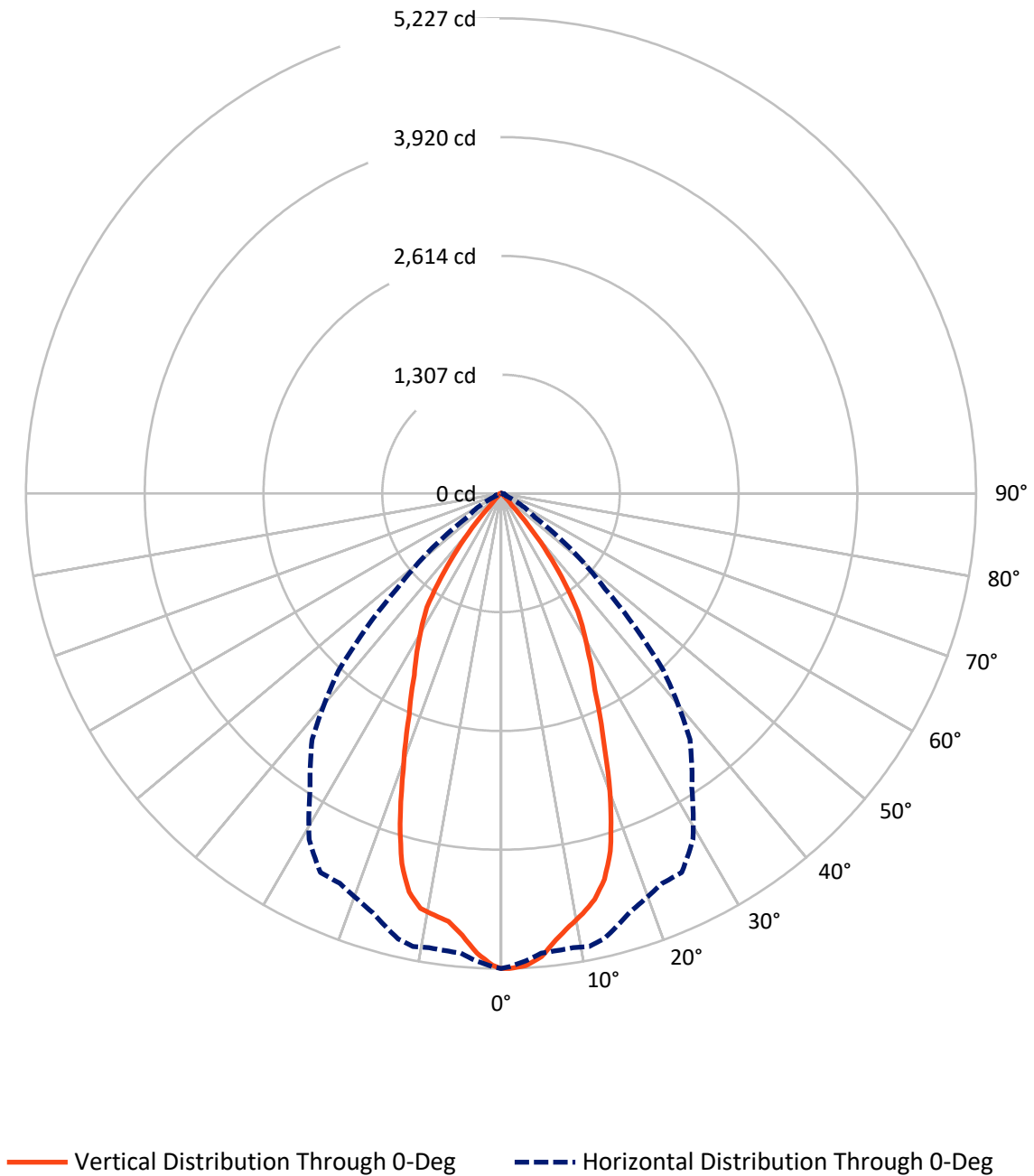
Lumen Table



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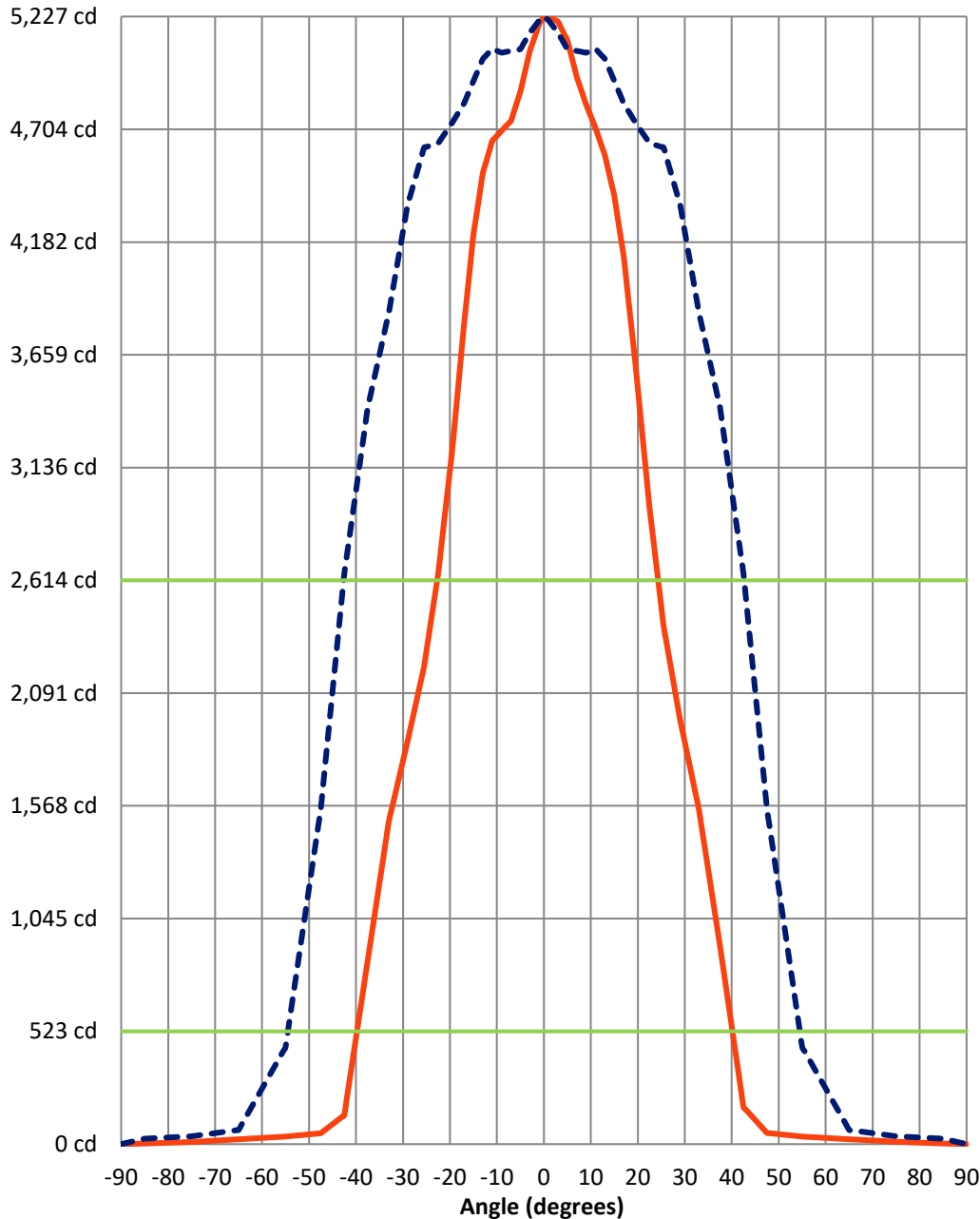
Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 85.3°
 V Angle: 47.1°
 Lumens: 3908.7
 Efficiency: 66.5%

Field:
 H Angle: 109°
 V Angle: 79.9°
 Lumens: 5616
 Efficiency: 95.5%

Spill:
 Lumens: 265.5
 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°	2.8	4.2	7.0	14.0	22.4	26.5	27.9	27.9	27.9	27.9	29.3
75°	11.2	11.2	11.2	9.8	9.8	11.2	12.6	16.8	21.0	25.2	27.9
65°	22.4	22.4	22.4	21.0	21.0	21.0	19.6	19.6	18.2	21.0	23.8
55°	34.9	34.9	34.9	33.5	33.5	33.5	33.5	32.1	32.1	30.7	30.7
47.5°	51.7	51.7	51.7	51.7	50.3	50.3	50.3	50.3	48.9	48.9	48.9
42.5°	171.9	184.4	173.3	183.0	178.8	187.2	205.4	216.6	225.0	208.2	183.0
37.5°	919.4	941.7	927.8	941.7	927.8	918.0	927.8	912.4	915.2	915.2	898.4
33°	1552.3	1569.1	1560.7	1564.9	1550.9	1542.5	1546.7	1530.0	1510.4	1510.4	1495.0
29°	1967.3	1982.7	1975.7	1958.9	1938.0	1921.2	1915.6	1903.0	1876.5	1876.5	1872.3
25.5°	2400.4	2407.4	2410.2	2380.9	2352.9	2326.4	2330.6	2332.0	2308.2	2322.2	2329.2
22.5°	2949.5	2977.5	2969.1	2923.0	2904.8	2871.3	2890.9	2902.0	2885.3	2890.9	2911.8
19.5°	3614.6	3641.2	3624.4	3579.7	3542.0	3487.5	3505.6	3523.8	3504.2	3493.1	3518.2
17°	4114.8	4134.4	4119.0	4058.9	3994.7	3933.2	3920.6	3920.6	3896.9	3868.9	3882.9
15°	4394.3	4406.9	4377.5	4292.3	4233.6	4148.4	4130.2	4114.8	4082.7	4042.2	4040.8
13°	4582.9	4584.3	4546.6	4466.9	4392.9	4300.7	4275.5	4249.0	4204.3	4149.8	4130.2
11°	4710.1	4710.1	4675.1	4596.9	4522.8	4436.2	4402.7	4370.5	4314.6	4242.0	4204.3
9°	4819.0	4819.0	4789.7	4721.2	4661.1	4568.9	4539.6	4497.7	4433.4	4345.4	4285.3
7°	4947.6	4951.8	4925.2	4866.5	4830.2	4743.6	4715.6	4658.4	4574.5	4472.5	4394.3
5°	5116.6	5116.6	5080.3	5021.6	4997.9	4933.6	4915.4	4854.0	4754.8	4634.6	4541.0
3°	5203.3	5193.5	5141.8	5073.3	5060.8	5032.8	5039.8	4988.1	4886.1	4761.7	4665.3
1°	5227.0	5217.2	5157.2	5073.3	5071.9	5060.8	5083.1	5038.4	4940.6	4834.4	4761.7
0°	5227.0	5208.9	5151.6	5076.1	5067.7	5059.4	5077.5	5030.0	4928.0	4824.6	4735.2
-1°	5192.1	5176.7	5123.6	5056.6	5037.0	5027.2	5038.4	4981.1	4880.5	4765.9	4650.0
-3°	5066.3	5046.8	5004.9	4961.6	4912.6	4872.1	4869.3	4793.9	4697.5	4602.5	4485.1
-5°	4879.1	4862.3	4826.0	4781.3	4718.4	4661.1	4633.2	4555.0	4478.1	4397.1	4292.3
-7°	4743.6	4731.0	4684.9	4629.0	4560.5	4492.1	4444.6	4385.9	4323.0	4246.2	4160.9
-9°	4697.5	4687.7	4634.6	4567.5	4487.9	4401.3	4360.7	4314.6	4261.5	4191.7	4128.8
-11°	4650.0	4636.0	4582.9	4506.1	4422.2	4341.2	4299.3	4260.1	4215.4	4159.5	4114.8
-13°	4500.5	4475.3	4433.4	4352.4	4272.7	4208.4	4169.3	4138.6	4112.0	4074.3	4050.6
-15°	4215.4	4207.0	4181.9	4099.5	4032.4	3982.1	3950.0	3930.4	3929.0	3902.5	3898.3
-17°	3799.1	3759.9	3757.1	3702.6	3641.2	3628.6	3610.4	3596.5	3597.9	3597.9	3603.4
-19.5°	3219.2	3209.4	3180.1	3135.4	3106.0	3096.3	3087.9	3090.7	3106.0	3107.4	3120.0
-22.5°	2644.9	2638.0	2628.2	2576.5	2563.9	2545.7	2531.8	2534.6	2545.7	2545.7	2561.1
-25.5°	2214.6	2209.0	2195.0	2153.1	2129.4	2102.8	2079.1	2080.5	2083.3	2083.3	2090.3
-29°	1869.5	1866.7	1865.3	1847.1	1827.6	1815.0	1799.6	1794.0	1781.5	1773.1	1763.3
-33°	1497.8	1495.0	1500.6	1489.4	1483.9	1478.3	1460.1	1467.1	1451.7	1439.1	1428.0
-37.5°	852.3	850.9	866.3	864.9	853.7	841.1	848.1	845.3	839.7	834.1	828.6
-42.5°	134.1	132.7	132.7	145.3	145.3	163.5	178.8	180.2	171.9	152.3	153.7
-47.5°	50.3	50.3	50.3	50.3	48.9	48.9	47.5	47.5	47.5	46.1	46.1
-55°	34.9	34.9	34.9	33.5	33.5	33.5	32.1	32.1	32.1	30.7	30.7
-65°	22.4	22.4	22.4	21.0	21.0	19.6	19.6	18.2	18.2	19.6	23.8
-75°	9.8	9.8	9.8	9.8	9.8	9.8	11.2	15.4	21.0	25.2	27.9
-85°	2.8	4.2	7.0	14.0	23.8	27.9	29.3	27.9	29.3	29.3	29.3
-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°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	30.7	30.7	30.7
75°	30.7	32.1	32.1	32.1	32.1	32.1	32.1	30.7	30.7	30.7	30.7
65°	27.9	32.1	34.9	36.3	37.7	39.1	36.3	34.9	32.1	32.1	30.7
55°	32.1	34.9	37.7	43.3	44.7	46.1	44.7	40.5	34.9	33.5	30.7
47.5°	47.5	48.9	50.3	54.5	57.3	58.7	57.3	47.5	37.7	34.9	30.7
42.5°	216.6	197.0	216.6	211.0	201.2	188.6	143.9	53.1	39.1	34.9	30.7
37.5°	876.1	860.7	841.1	816.0	588.2	645.5	290.6	58.7	40.5	34.9	30.7
33°	1464.3	1429.4	1390.2	1345.5	1274.3	1095.4	529.5	86.6	41.9	34.9	30.7
29°	1849.9	1806.6	1743.7	1682.3	1570.5	1339.9	892.8	148.1	43.3	34.9	29.3
25.5°	2313.8	2246.7	2116.8	1993.8	1813.6	1488.0	1014.4	194.2	44.7	34.9	29.3
22.5°	2903.4	2804.2	2593.3	2357.1	2070.7	1606.8	1096.8	229.1	46.1	34.9	27.9
19.5°	3515.4	3389.7	3114.4	2772.1	2355.7	1725.6	1162.5	258.5	47.5	34.9	27.9
17°	3896.9	3787.9	3498.7	3085.1	2559.7	1841.5	1215.6	279.4	47.5	34.9	27.9
15°	4074.3	3982.1	3680.3	3243.0	2689.7	1936.6	1261.7	294.8	47.5	34.9	26.5
13°	4176.3	4107.8	3789.3	3343.6	2801.4	2041.3	1310.6	307.4	48.9	34.9	26.5
11°	4249.0	4211.2	3887.1	3423.2	2916.0	2154.5	1370.7	318.6	50.3	34.9	26.5
9°	4317.4	4300.7	3993.3	3518.2	3055.7	2297.0	1430.8	327.0	53.1	34.9	26.5
7°	4401.3	4390.1	4102.3	3614.6	3178.7	2431.2	1485.3	333.9	55.9	34.9	25.2
5°	4522.8	4503.3	4226.6	3726.4	3284.9	2531.8	1524.4	339.5	61.5	36.3	25.2
3°	4610.8	4588.5	4320.2	3821.4	3375.7	2611.4	1545.3	342.3	64.3	36.3	25.2
1°	4647.2	4626.2	4362.1	3866.1	3420.4	2647.7	1556.5	345.1	65.7	36.3	25.2
0°	4640.2	4619.2	4355.2	3856.3	3414.8	2643.6	1555.1	449.9	65.7	36.3	25.2
-1°	4605.3	4585.7	4321.6	3821.4	3386.9	2617.0	1545.3	345.1	64.3	36.3	25.2
-3°	4475.3	4459.9	4194.5	3701.3	3286.3	2526.2	1513.2	342.3	60.1	34.9	25.2
-5°	4303.5	4300.7	4031.0	3551.7	3143.8	2387.9	1461.5	339.5	55.9	34.9	25.2
-7°	4187.5	4187.5	3903.9	3434.4	2988.7	2243.9	1398.6	333.9	53.1	34.9	25.2
-9°	4162.3	4147.0	3839.6	3379.9	2889.5	2146.1	1348.3	327.0	50.3	33.5	25.2
-11°	4156.7	4120.4	3796.3	3339.4	2816.8	2069.3	1310.6	317.2	48.9	33.5	25.2
-13°	4089.7	4021.2	3694.3	3243.0	2721.8	1984.1	1274.3	307.4	47.5	33.5	26.5
-15°	3927.6	3825.6	3502.8	3078.1	2598.8	1891.8	1237.9	293.4	46.1	32.1	26.5
-17°	3616.0	3498.7	3187.1	2812.6	2415.8	1795.4	1197.4	278.0	46.1	33.5	26.5
-19.5°	3127.0	3019.4	2762.3	2464.7	2158.7	1682.3	1141.5	257.1	44.7	33.5	26.5
-22.5°	2561.1	2466.1	2270.5	2072.1	1884.9	1555.1	1068.9	227.7	44.7	33.5	26.5
-25.5°	2081.9	2016.2	1904.4	1789.8	1651.5	1423.8	684.6	192.8	43.3	33.5	27.9
-29°	1743.7	1704.6	1648.7	1580.3	1482.5	1293.8	623.2	146.7	43.3	34.9	29.3
-33°	1411.2	1370.7	1328.8	1281.3	1208.6	1057.7	498.8	85.2	41.9	34.9	29.3
-37.5°	814.6	797.8	772.7	347.9	697.2	582.6	269.7	58.7	40.5	34.9	30.7
-42.5°	185.8	152.3	180.2	169.1	171.9	159.3	120.2	51.7	39.1	34.9	30.7
-47.5°	46.1	46.1	47.5	51.7	54.5	55.9	54.5	47.5	37.7	34.9	30.7
-55°	32.1	33.5	37.7	43.3	44.7	46.1	44.7	40.5	34.9	33.5	30.7
-65°	27.9	32.1	34.9	36.3	37.7	39.1	37.7	34.9	32.1	32.1	30.7
-75°	30.7	32.1	32.1	32.1	32.1	32.1	32.1	32.1	30.7	30.7	30.7
-85°	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
-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):

	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)