

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: P95368

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P95368
REPORT SCALED FROM IESNA LM79-08 TEST DATA (P22803)
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-MSR
Description: ARCHITECTURAL FLOOD LUMINAIRE
MEDIUM SYMMETRIC ROUND DISTRIBUTION
WITH 40 LED'S, 525mA DRIVE CURRENT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	5679.6 lumens	Max Intensity:	8799.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	85.8 lumens/watt		
Luminous Opening:	(L: 0.83 ' x W: 0 ' x H: 0.5 ')		
Beam Angle (50%):	56°H x 56°V	Field Angle (10%):	66.2°H x 64.7°V
Beam Lumens:	4773.4 lumens	Field Lumens:	5442.8 lumens
Beam Efficiency:	84.0%	Field Efficiency:	95.8%

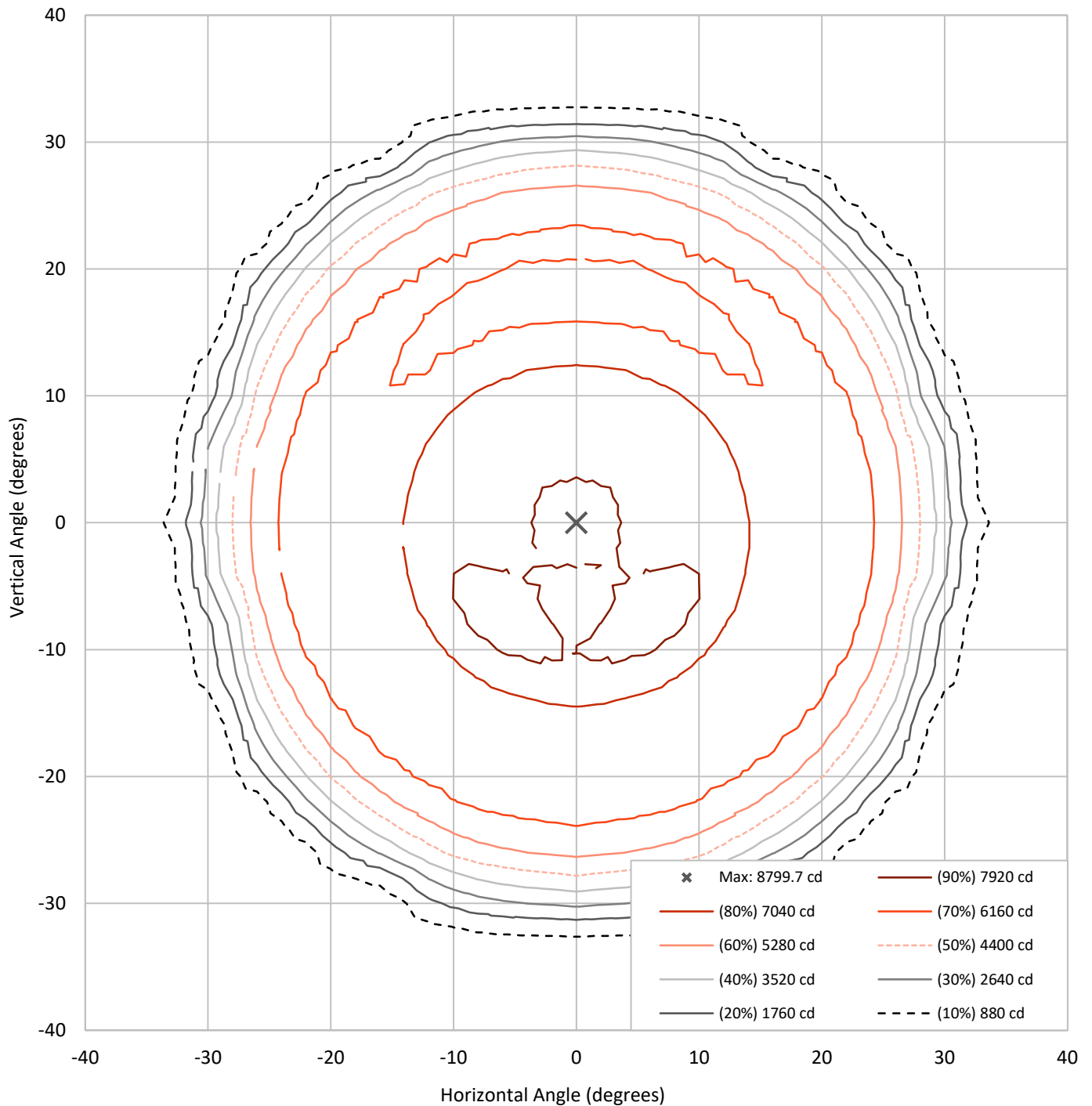
Input Watts (W): 66.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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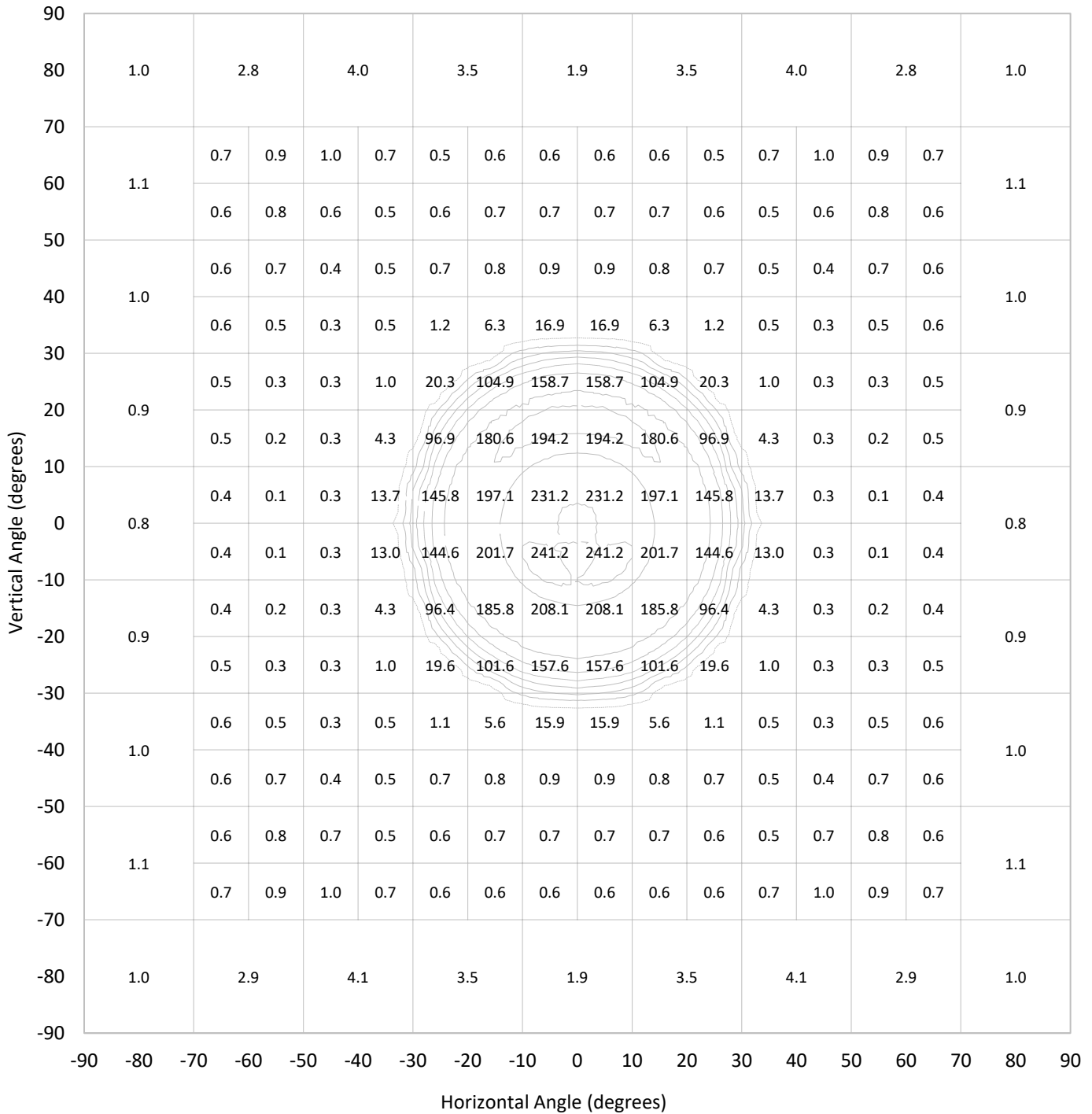
Iso-Candela Plot





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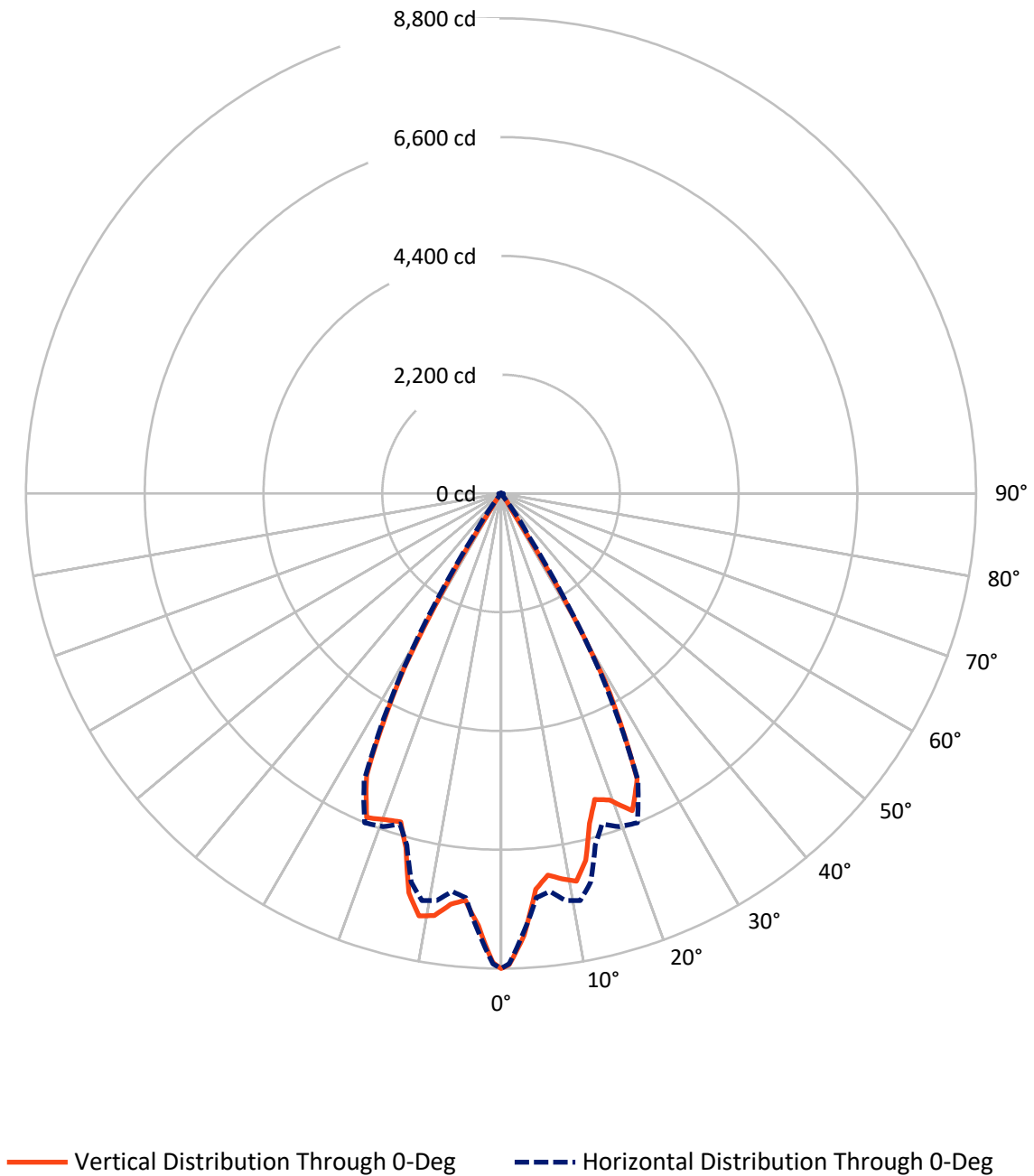
Lumen Table



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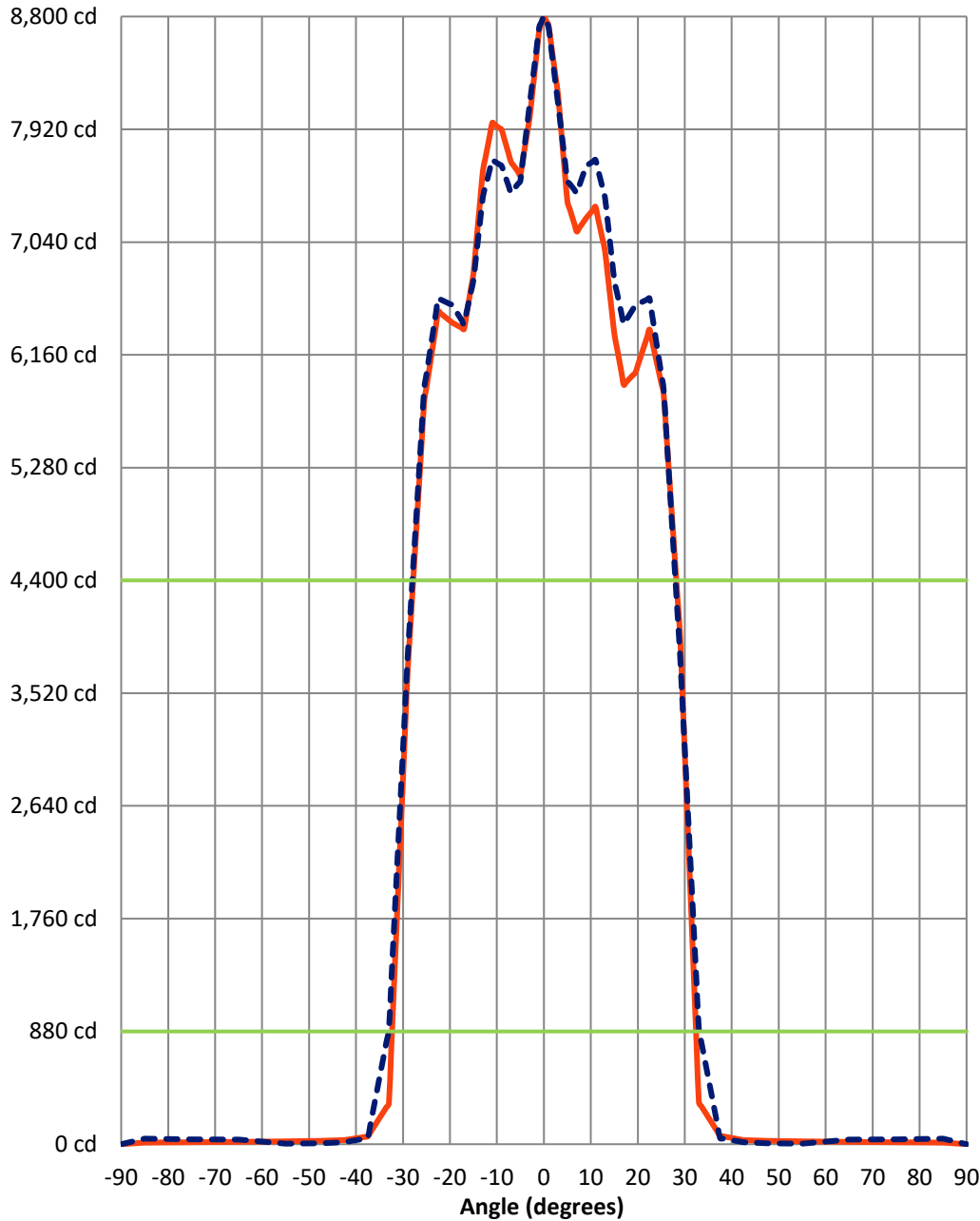
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Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:
 H Angle: 56°
 V Angle: 56°
 Lumens: 4773.4
 Efficiency: 84.0%

Field:
 H Angle: 66.2°
 V Angle: 64.7°
 Lumens: 5442.8
 Efficiency: 95.8%

Spill:
 Lumens: 236.7
 Efficiency: 4.2%

— 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°	12.6	12.6	18.2	16.8	12.6	32.1	47.5	48.9	48.9	48.9	48.9
75°	15.4	15.4	15.4	15.4	16.8	18.2	19.6	18.2	16.8	15.4	14.0
65°	18.2	18.2	18.2	18.2	18.2	19.6	19.6	21.0	21.0	21.0	21.0
55°	22.4	22.4	22.4	22.4	21.0	22.4	22.4	22.4	22.4	22.4	22.4
47.5°	26.5	26.5	26.5	26.5	26.5	26.5	25.2	25.2	25.2	25.2	23.8
42.5°	32.1	32.1	32.1	32.1	32.1	30.7	30.7	29.3	29.3	27.9	26.5
37.5°	65.7	64.3	64.3	64.3	60.1	57.3	53.1	47.5	43.3	39.1	34.9
33°	327.0	325.6	325.6	331.1	339.5	357.7	254.3	190.0	162.1	114.6	69.9
29°	3969.5	3894.1	3801.9	3649.6	3300.2	2897.8	2485.7	1998.0	360.5	353.5	287.8
25.5°	5855.8	5822.2	5776.1	5682.5	5505.1	5249.4	4888.9	4369.1	3660.7	2892.3	1929.6
22.5°	6357.4	6353.2	6328.0	6293.1	6244.2	6138.0	5952.2	5674.1	5236.8	4606.7	3574.1
19.5°	6022.0	6040.2	6058.4	6100.3	6188.3	6281.9	6312.7	6276.3	6121.2	5759.4	5000.7
17°	5927.0	5924.2	5932.6	5945.2	5952.2	6009.5	6136.6	6277.7	6339.2	6220.5	5748.2
15°	6325.2	6294.5	6251.2	6161.8	6044.4	5982.9	5989.9	6121.2	6290.3	6360.2	6114.3
13°	6975.0	6938.6	6885.5	6727.6	6483.1	6240.0	6058.4	6024.8	6172.9	6346.2	6339.2
11°	7314.5	7304.7	7318.7	7264.2	7064.4	6761.2	6396.5	6128.2	6105.9	6277.7	6435.6
9°	7226.5	7244.6	7396.9	7556.2	7510.1	7229.2	6831.0	6410.5	6166.0	6234.4	6438.4
7°	7121.7	7145.4	7345.2	7718.3	7947.4	7635.8	7225.1	6713.7	6304.3	6230.2	6421.7
5°	7357.8	7364.8	7408.1	7663.8	7951.6	7909.7	7556.2	7011.3	6460.8	6265.2	6420.3
3°	8194.7	8085.7	7719.7	7503.1	7585.5	7749.0	7675.0	7229.2	6603.3	6318.3	6430.0
1°	8729.9	8657.2	8087.1	7496.1	7430.5	7638.6	7668.0	7352.2	6715.1	6386.7	6536.2
0°	8799.7	8715.9	8124.9	7518.5	7423.5	7634.4	7680.6	7389.9	6741.6	6400.7	6547.4
-1°	8693.5	8613.9	8084.4	7547.8	7478.0	7680.6	7708.5	7417.9	6744.4	6400.7	6509.7
-3°	8017.3	8060.6	7824.5	7701.5	7771.4	7888.7	7800.7	7394.1	6692.7	6407.7	6498.5
-5°	7563.2	7586.9	7765.8	8080.2	8232.5	8144.4	7835.6	7211.1	6583.7	6425.8	6534.8
-7°	7665.2	7687.5	7961.4	8365.2	8517.5	8150.0	7581.4	6931.6	6488.7	6435.6	6569.8
-9°	7916.7	7940.4	8117.9	8282.8	8166.8	7690.3	7173.4	6639.6	6421.7	6449.6	6582.3
-11°	7969.8	8003.3	8018.7	7916.7	7602.3	7198.5	6731.8	6418.9	6382.5	6511.1	6554.4
-13°	7592.5	7624.7	7491.9	7247.4	6990.3	6650.8	6399.3	6340.6	6448.2	6547.4	6425.8
-15°	6794.7	6729.0	6659.2	6546.0	6453.8	6344.8	6332.2	6427.2	6526.4	6490.1	6138.0
-17°	6360.2	6361.6	6360.2	6349.0	6337.8	6367.2	6446.8	6512.5	6473.3	6258.2	5725.8
-19.5°	6410.5	6424.4	6439.8	6467.8	6491.5	6515.3	6481.7	6356.0	6100.3	5699.3	4911.3
-22.5°	6498.5	6488.7	6473.3	6430.0	6354.6	6193.9	5935.4	5576.3	5102.7	4478.1	3466.5
-25.5°	5787.3	5721.6	5660.2	5516.2	5401.7	5153.0	4724.0	4138.6	3456.7	2723.2	1792.6
-29°	3697.1	3578.3	3495.9	3345.0	3101.8	2758.1	2270.5	1727.0	352.1	350.7	259.9
-33°	318.6	315.8	318.6	327.0	338.1	321.4	198.4	159.3	141.1	99.2	65.7
-37.5°	60.1	58.7	58.7	60.1	57.3	54.5	50.3	46.1	41.9	39.1	34.9
-42.5°	32.1	32.1	32.1	32.1	32.1	30.7	30.7	29.3	29.3	27.9	26.5
-47.5°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	25.2	25.2	25.2	25.2
-55°	22.4	22.4	21.0	22.4	21.0	22.4	22.4	22.4	22.4	22.4	22.4
-65°	18.2	18.2	18.2	18.2	18.2	18.2	19.6	21.0	21.0	21.0	21.0
-75°	15.4	15.4	15.4	15.4	16.8	18.2	19.6	18.2	16.8	15.4	14.0
-85°	12.6	14.0	18.2	16.8	12.6	32.1	47.5	50.3	50.3	48.9	50.3
-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°	51.7	53.1	53.1	53.1	51.7	51.7	51.7	53.1	55.9	57.3	58.7
75°	22.4	33.5	47.5	48.9	48.9	47.5	50.3	53.1	51.7	53.1	57.3
65°	18.2	16.8	15.4	19.6	32.1	47.5	48.9	48.9	53.1	51.7	55.9
55°	22.4	21.0	19.6	16.8	15.4	22.4	36.3	48.9	47.5	53.1	54.5
47.5°	23.8	23.8	22.4	19.6	16.8	15.4	23.8	46.1	48.9	53.1	53.1
42.5°	26.5	25.2	23.8	21.0	18.2	15.4	16.8	37.7	48.9	51.7	53.1
37.5°	30.7	27.9	25.2	22.4	18.2	15.4	12.6	30.7	47.5	50.3	51.7
33°	47.5	37.7	29.3	23.8	19.6	15.4	12.6	25.2	46.1	48.9	50.3
29°	139.7	68.5	39.1	27.9	21.0	15.4	12.6	21.0	44.7	46.1	48.9
25.5°	321.4	181.6	76.8	34.9	22.4	15.4	11.2	16.8	43.3	44.7	47.5
22.5°	2101.4	304.6	171.9	46.1	25.2	15.4	11.2	14.0	43.3	43.3	47.5
19.5°	3597.9	1897.4	255.7	67.1	27.9	15.4	9.8	11.2	41.9	41.9	46.1
17°	4624.8	2907.6	289.2	102.0	29.3	15.4	9.8	9.8	40.5	41.9	46.1
15°	5242.4	3669.1	315.8	157.9	32.1	14.0	8.4	8.4	39.1	40.5	44.7
13°	5709.1	4311.8	1362.3	220.8	34.9	14.0	8.4	7.0	37.7	40.5	44.7
11°	6043.0	4820.4	1632.0	258.5	37.7	14.0	8.4	5.6	37.7	39.1	44.7
9°	6262.4	5217.2	1870.9	306.0	40.5	14.0	7.0	4.2	37.7	39.1	43.3
7°	6414.7	5514.9	3245.8	339.5	43.3	14.0	7.0	4.2	36.3	39.1	43.3
5°	6516.7	5703.5	3522.4	346.5	44.7	15.4	7.0	4.2	36.3	39.1	43.3
3°	6567.0	5823.6	3705.4	350.7	47.5	15.4	7.0	4.2	36.3	39.1	43.3
1°	6594.9	5885.1	3800.5	352.1	47.5	15.4	7.0	4.2	36.3	37.7	43.3
0°	6600.5	5890.7	3810.2	897.0	47.5	15.4	7.0	4.2	36.3	37.7	43.3
-1°	6603.3	5883.7	3799.1	352.1	47.5	15.4	7.0	4.2	36.3	37.7	43.3
-3°	6594.9	5822.2	3708.2	350.7	47.5	15.4	7.0	4.2	36.3	39.1	43.3
-5°	6565.6	5686.7	3518.2	346.5	46.1	15.4	7.0	4.2	36.3	39.1	43.3
-7°	6483.1	5502.3	2060.9	339.5	43.3	14.0	7.0	4.2	36.3	39.1	43.3
-9°	6308.5	5218.6	1861.1	300.4	40.5	14.0	7.0	4.2	36.3	39.1	43.3
-11°	6043.0	4813.4	1626.4	258.5	36.3	14.0	8.4	5.6	37.7	39.1	43.3
-13°	5688.1	4289.5	1358.1	223.6	33.5	14.0	8.4	5.6	37.7	39.1	44.7
-15°	5199.1	3632.8	314.4	157.9	30.7	14.0	8.4	7.0	39.1	40.5	44.7
-17°	4575.9	2874.1	287.8	102.0	29.3	14.0	8.4	8.4	39.1	40.5	44.7
-19.5°	3497.3	1869.5	252.9	64.3	26.5	14.0	9.8	11.2	40.5	41.9	46.1
-22.5°	2040.0	301.8	167.7	43.3	23.8	15.4	9.8	14.0	41.9	43.3	46.1
-25.5°	315.8	176.1	74.1	33.5	22.4	15.4	11.2	16.8	43.3	44.7	47.5
-29°	128.5	64.3	39.1	27.9	21.0	15.4	12.6	21.0	44.7	46.1	47.5
-33°	46.1	36.3	29.3	23.8	19.6	15.4	12.6	25.2	46.1	47.5	48.9
-37.5°	30.7	27.9	25.2	22.4	19.6	15.4	14.0	30.7	47.5	50.3	50.3
-42.5°	26.5	25.2	23.8	21.0	18.2	15.4	16.8	39.1	48.9	51.7	51.7
-47.5°	23.8	23.8	22.4	21.0	18.2	15.4	23.8	46.1	48.9	53.1	53.1
-55°	22.4	22.4	19.6	18.2	15.4	23.8	37.7	48.9	48.9	53.1	54.5
-65°	19.6	16.8	15.4	19.6	33.5	47.5	50.3	48.9	53.1	51.7	55.9
-75°	22.4	34.9	47.5	48.9	50.3	48.9	50.3	54.5	53.1	53.1	57.3
-85°	53.1	54.5	54.5	53.1	53.1	51.7	53.1	54.5	55.9	57.3	58.7
-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)