

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: P196290

Luminaire Tested: **NVN-AF-06-LED-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196290  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-06-LED-U-T2R  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38615.4 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

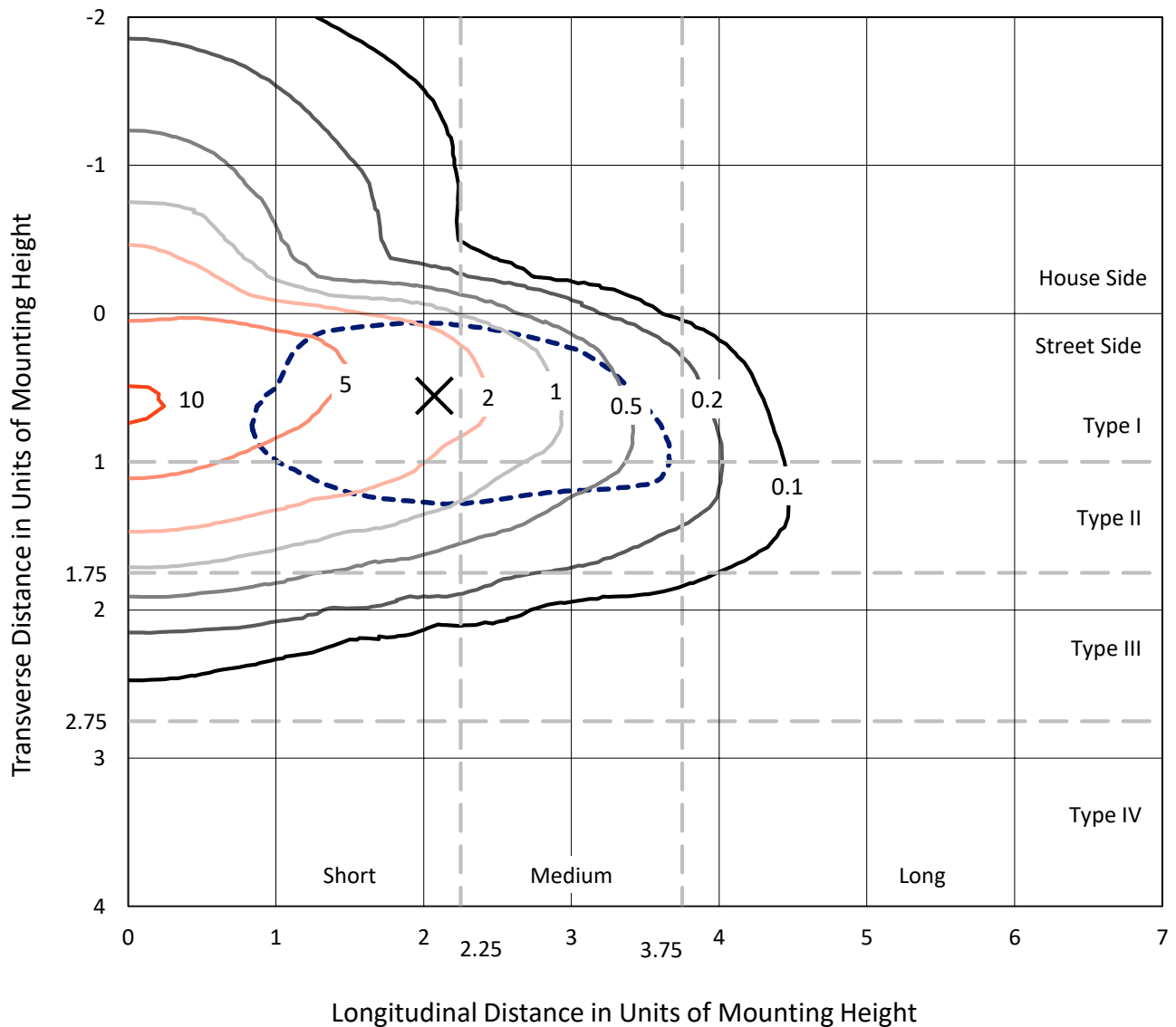
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

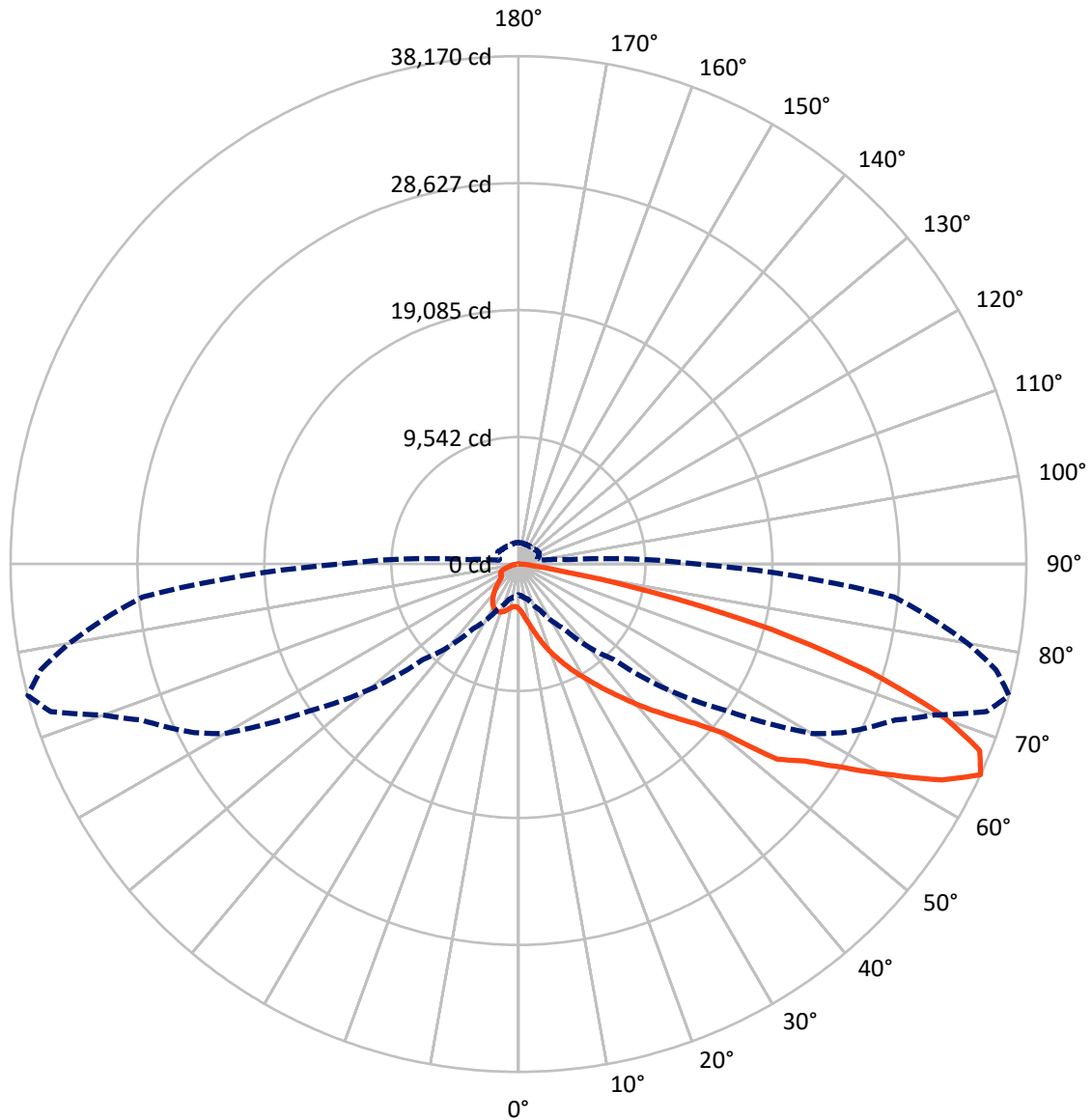
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5802.5	0.0	5802.5
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	32812.8	0.0	32812.8
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	38615.4	0.0	38615.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	395.0	1.0
10°-20°	1508.7	3.9
20°-30°	3044.7	7.9
30°-40°	5170.7	13.4
40°-50°	7211.8	18.7
50°-60°	8839.0	22.9
60°-70°	8316.3	21.5
70°-80°	3646.6	9.4
80°-90°	482.5	1.2
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°	38615.4	100.0
0°-180°	38615.4	100.0



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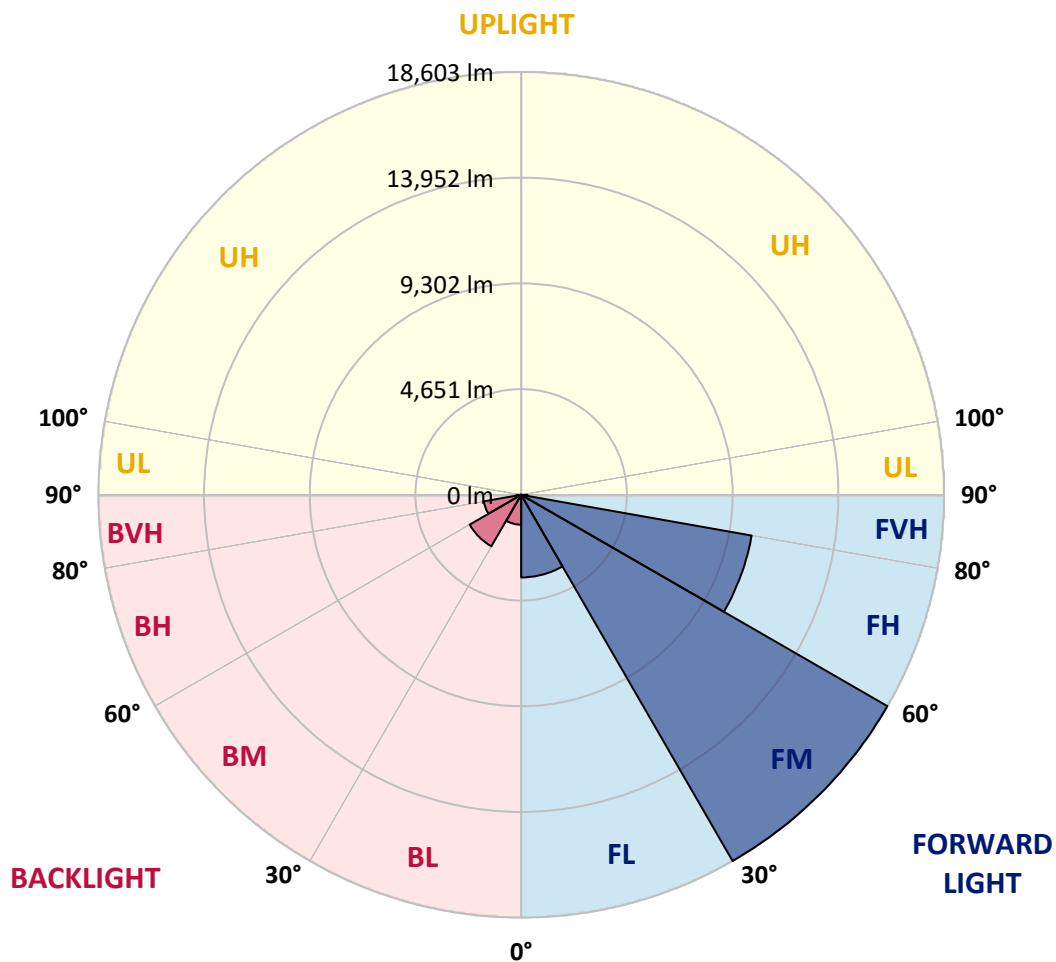
CATALOG NUMBER: NVN-AF-06-LED-U-T2R

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3634.8	9.4			
FM (30°-60°)	18603.1	48.2			
FH (60°-80°)	10295.2	26.7			G4/12000
FVH (80°-90°)	279.7	0.7			G3/500
BL (0°-30°)	1313.6	3.4	B3/2500		
BM (30°-60°)	2618.4	6.8	B3/5000		
BH (60°-80°)	1667.7	4.3	B3/2500		G3/2500
BVH (80°-90°)	202.8	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8
2.5°	4212.9	4163.8	4168.7	4100.0	3999.2	3888.6	3797.8	3748.7	3706.9	3694.6	3625.8
5°	5510.0	5448.5	5426.4	5269.2	5033.4	4753.3	4475.8	4367.7	4279.3	4225.2	4092.5
7.5°	6571.2	6539.3	6509.8	6364.9	6131.5	5772.8	5325.8	5166.1	5018.7	4856.6	4696.9
10°	7293.4	7281.2	7268.9	7168.1	6974.1	6662.1	6180.6	6006.2	5821.9	5615.6	5406.8
12.5°	7838.8	7838.8	7848.6	7765.1	7647.2	7406.5	6969.2	6807.0	6620.3	6404.2	6165.8
15°	8204.8	8214.6	8266.2	8290.8	8229.3	8074.6	7691.4	7548.9	7372.0	7158.3	6922.5
17.5°	8447.9	8467.7	8543.8	8624.8	8703.5	8649.5	8364.5	8231.8	8072.1	7875.6	7654.5
20°	9013.0	8988.5	8990.9	8966.3	9081.8	9123.5	8966.3	8855.8	8728.0	8548.7	8347.3
22.5°	10199.5	10152.8	10032.5	9725.4	9585.4	9570.6	9477.2	9418.3	9320.0	9207.1	9005.6
25°	11747.1	11693.0	11454.8	10948.7	10531.1	10145.4	9973.5	9936.6	9872.8	9796.6	9651.6
27.5°	13346.3	13287.3	12980.2	12341.6	11796.3	11017.5	10482.0	10432.9	10373.9	10341.9	10273.2
30°	14753.9	14690.0	14387.9	13739.4	13081.0	12152.5	11167.3	10995.4	10894.7	10904.6	10865.2
32.5°	15989.5	15933.0	15594.0	14933.2	14265.0	13363.5	12056.6	11788.9	11562.8	11479.3	11508.8
35°	17026.2	16974.5	16603.6	15937.9	15264.9	14515.6	13201.4	12798.4	12430.0	12199.1	12172.1
37.5°	17635.4	17605.9	17345.6	16780.5	16112.3	15562.0	14483.7	14036.6	13493.6	13157.1	13009.8
40°	17601.0	17632.9	17588.7	17333.2	16814.9	16414.5	15820.0	15377.8	14847.2	14346.1	14046.4
42.5°	17099.9	17144.0	17343.1	17475.7	17335.6	17092.5	16986.8	16657.7	16181.1	15650.5	15235.3
45°	16412.0	16451.3	16709.3	17188.3	17588.7	17657.5	18008.7	17844.1	17441.3	16989.3	16532.4
47.5°	15358.2	15434.4	15734.0	16495.6	17448.7	18112.0	18866.1	18942.3	18708.8	18335.5	17908.1
50°	13832.6	13933.4	14353.4	15436.8	16918.1	18578.7	20141.1	20430.9	20337.6	19959.3	19526.9
52.5°	12270.3	12371.1	12931.1	14083.3	16063.2	18770.3	21396.3	22138.2	22673.7	23064.3	23140.5
55°	10644.1	10757.1	11371.2	12697.8	14923.4	18527.1	22293.0	23135.6	23678.4	24086.2	24250.8
57.5°	8809.1	8936.8	9531.3	10872.5	13311.9	17549.4	23290.3	24484.1	25292.4	25921.3	26275.0
60°	6703.8	6863.5	7480.1	8831.2	11194.4	15677.5	23734.9	25501.1	26786.0	27729.2	28289.3
62.5°	4249.7	4411.9	5053.1	6455.7	8784.5	13120.3	22477.2	25054.1	27245.3	28640.6	29667.4
65°	2318.9	2390.2	2746.4	3802.7	5922.7	10179.8	19288.7	22327.3	25484.0	27461.5	29038.6
67.5°	1739.2	1749.0	1785.9	2043.9	3154.2	6873.3	15080.6	17863.9	21369.3	23914.2	25798.4
70°	1523.1	1523.1	1528.0	1530.4	1712.2	3724.1	10216.7	12778.8	15992.0	18566.5	20907.5
72.5°	1365.8	1351.1	1346.2	1316.7	1341.3	1908.7	5561.6	7863.3	10572.9	13461.7	15645.6
75°	1179.2	1176.7	1176.7	1147.2	1162.0	1343.7	2412.3	3773.3	5873.6	8563.4	10712.9
77.5°	1019.5	1002.3	1004.7	987.6	1034.2	1029.3	1144.8	1555.0	2557.3	4497.9	6281.3
80°	840.1	827.9	835.2	825.4	899.1	761.5	771.3	950.6	1270.0	1972.6	2780.8
82.5°	621.5	626.5	673.1	668.2	756.6	513.4	565.0	709.9	854.9	982.6	1068.6
85°	363.6	370.9	484.0	508.5	555.2	270.3	346.4	422.5	476.6	528.1	550.2
87.5°	39.3	51.6	270.3	277.6	248.1	81.0	140.0	176.9	189.1	201.4	176.9
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):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8
2.5°	3603.8	3571.7	3537.4	3517.7	3483.4	3453.9	3399.9	3355.6	3306.5	3272.1	3257.4
5°	4026.2	3950.1	3869.0	3810.1	3736.3	3672.5	3549.6	3402.3	3355.6	3257.4	3232.8
7.5°	4576.5	4438.9	4301.4	4188.4	4060.6	3955.0	3748.7	3483.4	3449.0	3291.8	3257.4
10°	5222.6	5021.2	4817.3	4642.9	4456.2	4294.0	3989.4	3616.0	3579.2	3377.7	3343.3
12.5°	5944.8	5699.2	5436.3	5175.9	4954.8	4726.3	4311.2	3822.4	3763.4	3525.1	3478.4
15°	6689.1	6423.8	6119.2	5804.7	5532.1	5229.9	4706.7	4092.5	3984.5	3704.4	3640.6
17.5°	7423.7	7136.2	6816.8	6465.6	6146.2	5785.1	5134.1	4394.7	4208.0	3881.3	3800.3
20°	8133.6	7841.2	7504.7	7160.8	6762.8	6350.1	5571.4	4692.0	4407.0	4028.7	3923.1
22.5°	8779.6	8529.1	8192.5	7797.0	7394.1	6929.9	6016.1	4989.2	4581.4	4141.7	4006.6
25°	9460.0	9231.6	8897.5	8516.8	8047.6	7531.7	6475.4	5271.7	4721.4	4203.1	4036.1
27.5°	10147.9	9951.4	9636.9	9236.5	8732.9	8160.6	6942.2	5532.1	4834.5	4222.7	4021.3
30°	10882.4	10730.1	10440.2	9993.1	9484.6	8850.9	7450.7	5787.5	4905.7	4195.7	3955.0
32.5°	11577.6	11572.6	11314.8	10850.4	10302.6	9605.0	7986.2	6045.5	4942.5	4119.6	3839.5
35°	12299.9	12400.5	12206.5	11764.3	11187.0	10413.2	8578.2	6320.6	4944.9	3984.5	3689.7
37.5°	13120.3	13299.6	13213.7	12793.5	12186.8	11334.4	9273.4	6630.2	4930.2	3797.8	3471.1
40°	14053.8	14299.4	14297.0	13943.2	13294.7	12366.1	10081.6	6976.5	4895.8	3564.4	3213.1
42.5°	15122.4	15414.6	15495.8	15146.9	14491.0	13493.6	11007.7	7357.3	4841.8	3333.5	2940.5
45°	16345.7	16603.6	16755.9	16431.7	15773.4	14721.9	12071.3	7789.7	4775.4	3036.2	2628.5
47.5°	17655.0	17954.7	18183.2	17905.6	17203.1	16122.2	13331.6	8347.3	4750.9	2697.2	2291.9
50°	19278.8	19588.3	20082.1	19956.8	19571.1	18701.5	15996.9	9663.9	4760.7	2375.5	2009.5
52.5°	23307.5	24017.5	24641.4	24363.8	23447.6	21956.4	18163.5	10396.0	4554.4	2112.6	1812.9
55°	24523.5	25329.2	26250.5	26135.0	25255.5	23752.1	19875.7	11007.7	4355.4	1921.0	1685.2
57.5°	26650.8	27601.5	28888.7	28864.2	27785.7	26093.2	22079.3	11739.7	4269.4	1810.4	1621.3
60°	28903.5	30114.5	31893.0	32170.7	30998.9	29237.6	24683.2	12638.9	4281.8	1749.0	1584.4
62.5°	30549.3	32325.3	34912.1	35742.4	34361.8	32421.2	27385.3	13537.9	4208.0	1677.8	1540.3
65°	30650.1	33207.3	36877.4	38169.5	36771.7	34278.4	28338.5	13361.1	3765.9	1582.0	1469.0
67.5°	28193.5	31524.6	35983.1	37400.6	35970.8	33133.6	26668.0	11680.8	3060.9	1414.9	1346.2
70°	23481.9	27348.5	31976.5	33556.2	32374.6	29502.8	23209.2	9329.9	2287.0	1193.9	1162.0
72.5°	18146.3	21752.5	25955.6	27417.2	26513.2	23988.0	18306.0	6799.7	1633.6	967.9	943.3
75°	12972.9	16043.6	19094.6	19652.2	18760.5	16441.5	11877.3	4247.3	1144.8	793.5	759.0
77.5°	8032.8	10030.0	11125.6	10408.3	9270.9	7706.1	4834.5	2097.9	761.5	646.1	611.7
80°	3564.4	4183.5	3905.8	3480.9	2748.9	2260.0	1476.3	931.0	491.3	498.7	479.0
82.5°	1198.8	1267.5	1233.2	1225.8	1105.4	967.9	626.5	402.8	275.2	319.4	312.0
85°	584.6	611.7	614.2	636.3	552.7	429.8	169.5	159.7	117.9	172.0	179.3
87.5°	176.9	179.3	162.1	176.9	142.5	98.3	31.9	44.2	22.1	41.7	41.7
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):**

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8
2.5°	3230.4	3220.5	3203.3	3183.6	3178.7	3154.2	3146.8	3134.5	3127.2	3114.9	3105.1
5°	3200.8	3183.6	3164.0	3141.9	3141.9	3107.5	3092.8	3078.1	3078.1	3056.0	3046.0
7.5°	3230.4	3208.2	3186.1	3166.4	3173.8	3134.5	3119.8	3105.1	3102.6	3080.5	3070.7
10°	3313.8	3291.8	3264.7	3245.1	3237.7	3205.7	3188.5	3166.4	3151.7	3137.0	3122.3
12.5°	3441.6	3412.2	3377.7	3335.9	3318.8	3291.8	3264.7	3235.3	3200.8	3186.1	3164.0
15°	3593.9	3544.7	3498.1	3446.5	3399.9	3372.8	3335.9	3289.3	3242.7	3222.9	3193.4
17.5°	3719.1	3667.6	3601.3	3539.8	3456.3	3434.3	3382.6	3326.1	3250.0	3242.7	3198.4
20°	3824.8	3746.1	3665.1	3591.5	3463.7	3451.4	3387.5	3321.2	3213.1	3213.1	3159.1
22.5°	3883.7	3775.7	3679.9	3581.7	3422.0	3412.2	3338.4	3259.8	3127.2	3132.1	3065.8
25°	3893.6	3763.4	3643.0	3525.1	3340.9	3323.7	3230.4	3144.3	2999.4	2989.6	2920.8
27.5°	3854.3	3702.0	3561.9	3419.5	3220.5	3183.6	3080.5	2977.3	2834.8	2810.3	2736.6
30°	3763.4	3584.1	3426.9	3262.3	3053.5	2994.5	2886.5	2780.8	2635.8	2603.9	2535.2
32.5°	3618.5	3414.6	3240.2	3075.6	2844.6	2771.0	2662.8	2557.3	2417.2	2392.7	2328.7
35°	3426.9	3198.4	3014.1	2839.7	2608.8	2532.7	2429.5	2336.1	2208.4	2198.6	2154.3
37.5°	3186.1	2947.8	2751.3	2584.3	2365.7	2326.3	2220.7	2151.9	2046.3	2056.1	2034.0
40°	2913.5	2670.2	2483.5	2336.1	2147.0	2112.6	2048.8	1997.1	1906.3	1933.3	1935.7
42.5°	2638.3	2395.1	2225.6	2093.0	1930.8	1908.7	1864.5	1835.1	1766.2	1820.2	1842.4
45°	2326.3	2100.3	1955.4	1854.7	1734.3	1734.3	1712.2	1709.8	1663.1	1739.2	1761.3
47.5°	2024.2	1847.3	1746.6	1685.2	1601.6	1640.9	1633.6	1653.2	1618.8	1697.5	1717.1
50°	1795.7	1672.9	1611.5	1582.0	1523.1	1584.4	1599.2	1626.2	1596.7	1665.6	1680.3
52.5°	1650.7	1569.7	1535.3	1528.0	1486.2	1562.4	1586.9	1611.5	1577.1	1640.9	1638.5
55°	1569.7	1515.7	1503.4	1518.2	1486.2	1559.9	1584.4	1601.6	1572.2	1616.4	1613.9
57.5°	1540.3	1510.8	1518.2	1540.3	1518.2	1579.5	1591.8	1611.5	1582.0	1601.6	1611.5
60°	1537.8	1537.8	1567.3	1596.7	1582.0	1626.2	1633.6	1631.1	1604.1	1606.5	1611.5
62.5°	1523.1	1559.9	1609.0	1655.7	1650.7	1704.8	1709.8	1677.8	1655.7	1631.1	1623.7
65°	1476.3	1537.8	1609.0	1672.9	1682.8	1766.2	1776.0	1744.1	1729.4	1687.7	1655.7
67.5°	1373.2	1451.8	1535.3	1613.9	1631.1	1744.1	1766.2	1778.5	1785.9	1758.9	1717.1
70°	1198.8	1279.8	1365.8	1456.7	1481.3	1606.5	1653.2	1709.8	1754.0	1793.2	1778.5
72.5°	975.3	1048.9	1122.6	1206.2	1243.0	1373.2	1434.6	1532.9	1601.6	1702.4	1744.1
75°	773.8	818.1	862.2	913.8	943.3	1071.0	1147.2	1265.1	1358.5	1498.5	1591.8
77.5°	609.2	631.4	653.5	675.6	687.8	759.0	820.5	938.4	1046.5	1223.3	1360.9
80°	469.2	481.5	484.0	491.3	486.4	520.8	542.9	614.2	707.5	881.9	1044.0
82.5°	302.2	312.0	316.9	329.2	304.6	348.8	363.6	370.9	420.0	547.8	663.3
85°	169.5	172.0	174.4	179.3	145.0	189.1	191.6	179.3	174.4	226.0	255.4
87.5°	41.7	39.3	41.7	41.7	17.2	39.3	39.3	27.0	19.6	36.8	29.5
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):**

	135°	145°	155°	165°	175°	180°
0°	3345.8	3345.8	3345.8	3345.8	3345.8	3345.8
2.5°	3083.0	3078.1	3080.5	3068.2	3063.3	3065.8
5°	3033.8	3023.9	3023.9	3016.6	3006.8	3006.8
7.5°	3056.0	3036.2	3028.9	3014.1	2999.4	3001.8
10°	3090.3	3056.0	3031.3	3009.2	2992.0	2992.0
12.5°	3112.4	3051.1	3014.1	2984.7	2965.0	2965.0
15°	3117.3	3023.9	2969.9	2938.0	2918.4	2918.4
17.5°	3087.9	2969.9	2901.2	2859.4	2837.3	2842.2
20°	3014.1	2869.2	2788.2	2744.0	2721.9	2724.3
22.5°	2898.7	2731.7	2638.3	2586.7	2564.6	2564.6
25°	2741.5	2559.7	2459.0	2417.2	2397.6	2397.6
27.5°	2562.2	2375.5	2287.0	2255.1	2242.8	2242.8
30°	2360.8	2206.0	2142.1	2120.0	2100.3	2100.3
32.5°	2191.3	2080.7	2058.6	2029.1	1977.5	1975.0
35°	2056.1	2043.9	2026.7	1938.2	1864.5	1854.7
37.5°	1982.4	2056.1	1948.0	1795.7	1736.8	1734.3
40°	1943.1	2011.9	1825.1	1751.5	1744.1	1744.1
42.5°	1849.8	1898.9	1817.8	1776.0	1776.0	1778.5
45°	1751.5	1793.2	1835.1	1798.1	1810.4	1812.9
47.5°	1682.8	1766.2	1835.1	1803.1	1827.6	1842.4
50°	1618.8	1741.7	1798.1	1798.1	1825.1	1827.6
52.5°	1604.1	1707.3	1763.8	1790.8	1793.2	1781.0
55°	1606.5	1680.3	1736.8	1771.1	1756.4	1756.4
57.5°	1604.1	1665.6	1714.7	1726.9	1734.3	1734.3
60°	1606.5	1645.8	1685.2	1680.3	1704.8	1704.8
62.5°	1613.9	1618.8	1638.5	1633.6	1670.5	1670.5
65°	1631.1	1584.4	1572.2	1577.1	1621.3	1618.8
67.5°	1663.1	1537.8	1498.5	1501.0	1564.8	1555.0
70°	1709.8	1473.9	1414.9	1400.2	1508.3	1491.2
72.5°	1724.5	1400.2	1306.8	1292.1	1356.0	1306.8
75°	1655.7	1341.3	1191.4	1142.3	1115.2	1100.5
77.5°	1476.3	1304.4	1071.0	967.9	926.1	916.3
80°	1223.3	1228.3	913.8	791.0	918.7	916.3
82.5°	923.6	1061.2	732.0	685.4	665.7	555.2
85°	447.1	798.4	562.5	471.7	282.5	267.8
87.5°	39.3	334.1	324.3	211.2	95.9	90.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)