

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: P842488

Luminaire Tested: **ARCH4-50-750-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6858 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53.2
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: 24 FT



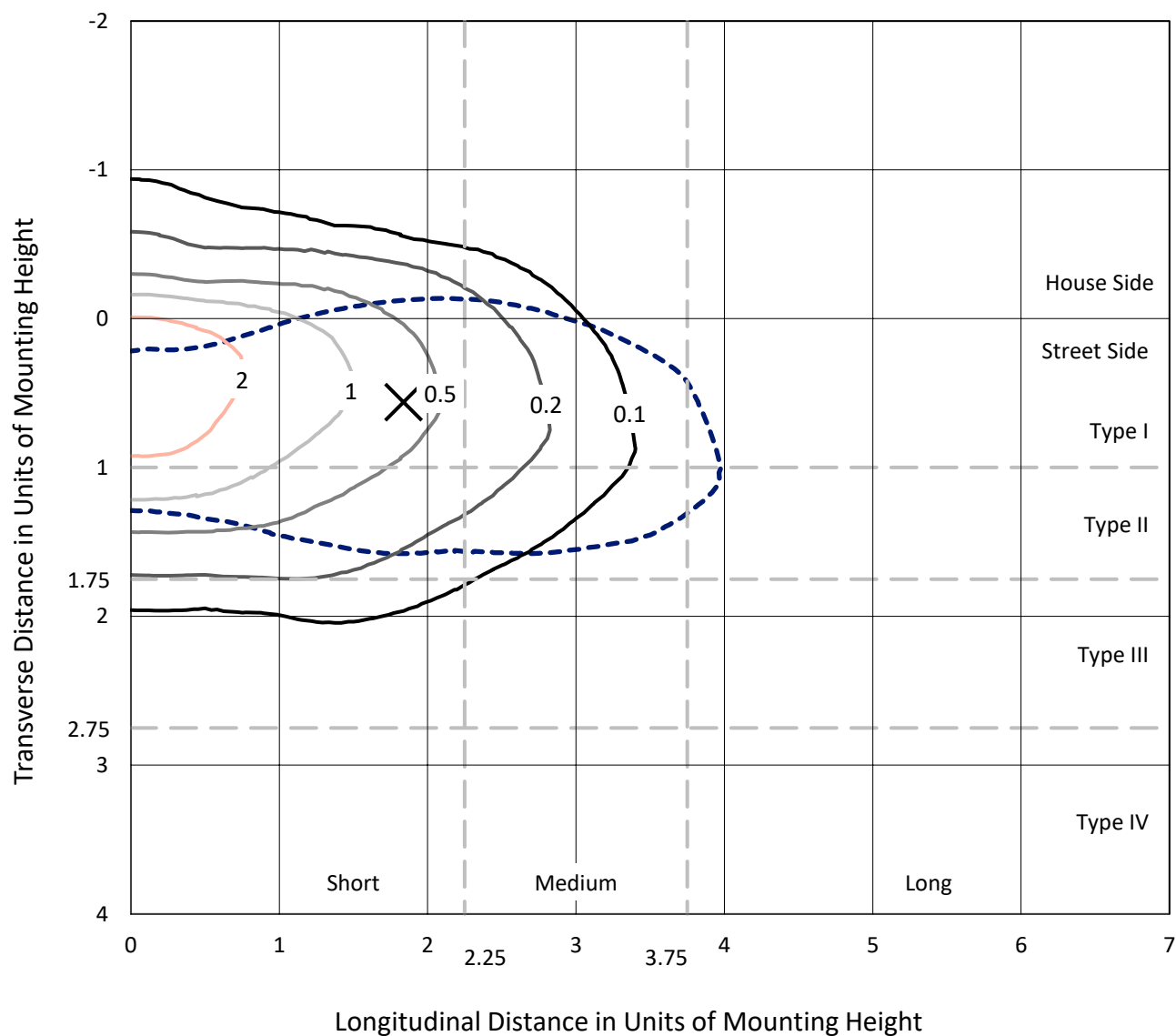
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

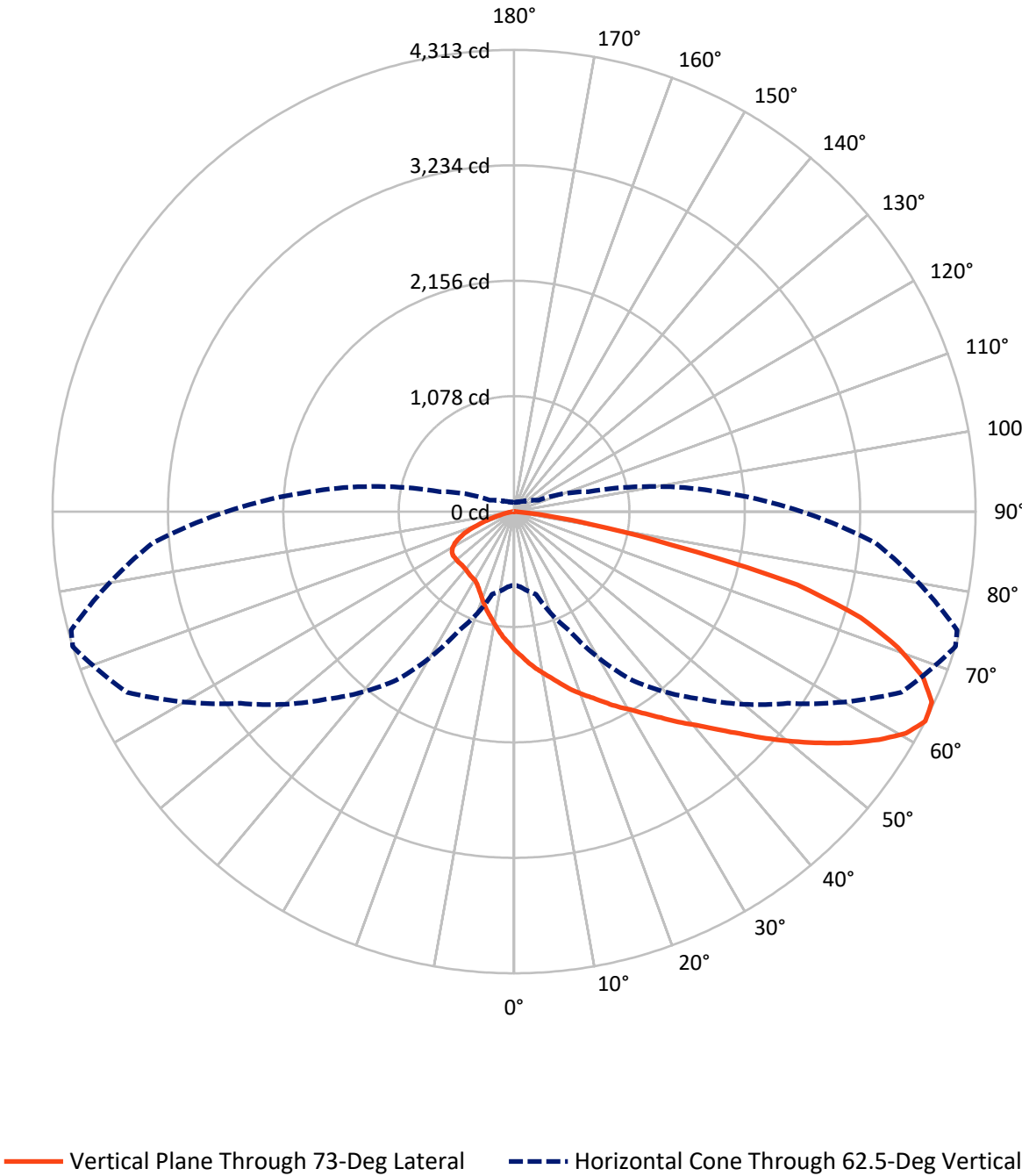


Based on 25 foot mounting height. Maximum calculated value = 3.3 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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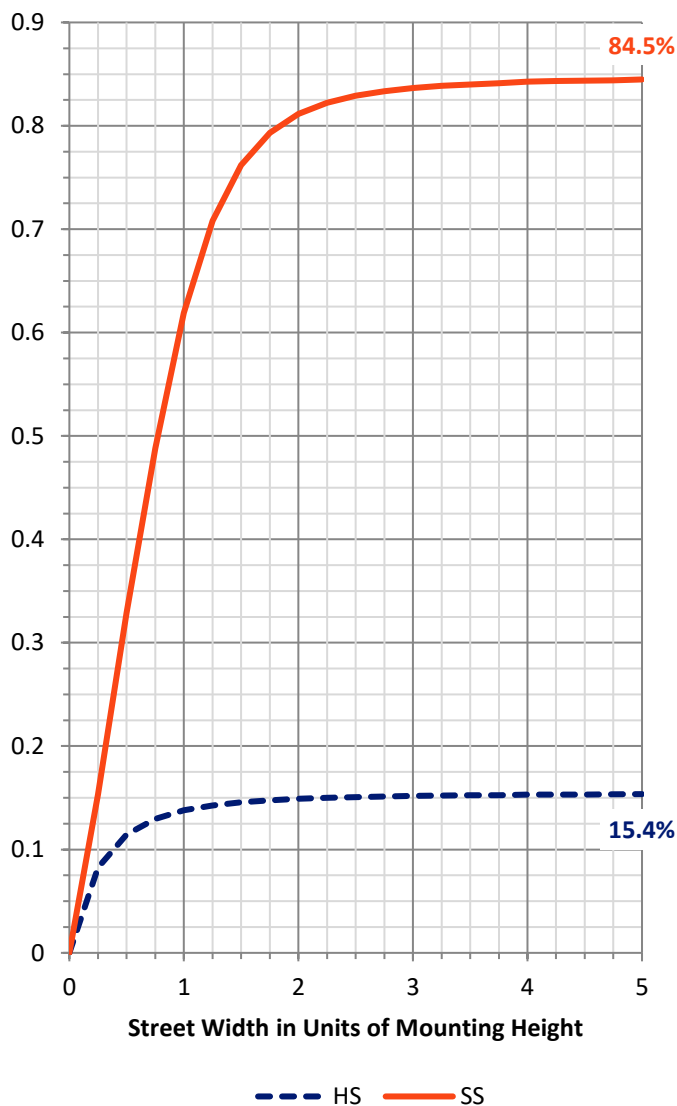
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1063.1	0.0	1063.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	5794.9	0.0	5794.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	6858.0	0.0	6858.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	1.8
10°-20°	378.6	5.5
20°-30°	630.1	9.2
30°-40°	950.7	13.9
40°-50°	1328.9	19.4
50°-60°	1467.8	21.4
60°-70°	1278.7	18.6
70°-80°	645.9	9.4
80°-90°	51.8	0.8
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°	6858.0	100.0
0°-180°	6858.0	100.0

Coefficient of Utilization



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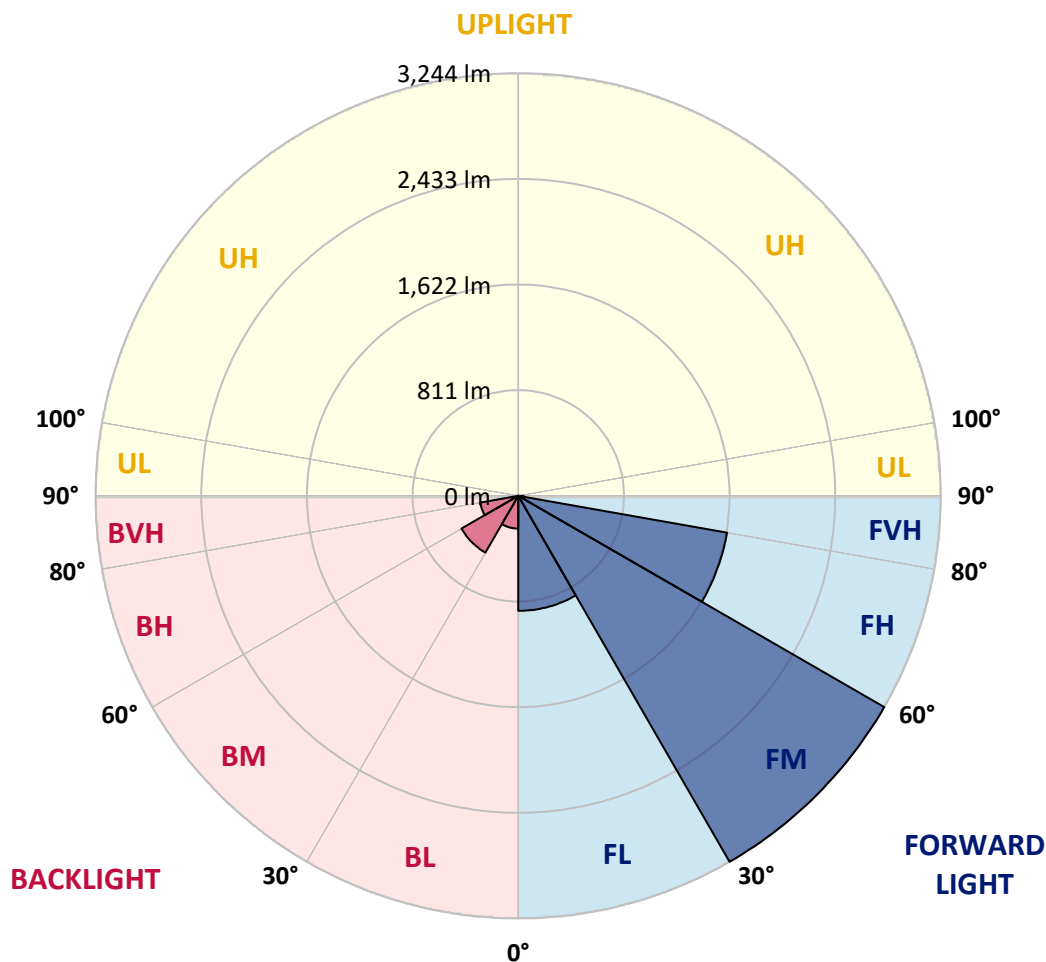
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	882.8	12.9			
FM	(30°-60°)	3244.1	47.3			
FH	(60°-80°)	1627.9	23.7			G1/1800
FVH	(80°-90°)	40.1	0.6			G1/100
BL	(0°-30°)	251.3	3.7	B1/500		
BM	(30°-60°)	503.4	7.3	B1/1000		
BH	(60°-80°)	296.7	4.3	B1/500		G1/500
BVH	(80°-90°)	11.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6
2.5°	1477.9	1494.3	1485.4	1491.3	1461.5	1442.0	1419.6	1376.3	1352.4	1349.4	1321.0
5°	1694.6	1712.5	1697.6	1693.1	1640.8	1595.9	1545.1	1468.9	1418.1	1409.2	1346.4
7.5°	1911.3	1927.7	1909.8	1896.3	1826.1	1746.9	1672.2	1560.1	1480.9	1465.9	1367.3
10°	2063.7	2078.6	2065.2	2051.7	1978.5	1897.8	1791.7	1645.3	1537.7	1513.8	1380.8
12.5°	2178.7	2187.7	2181.7	2169.8	2101.0	2014.4	1912.7	1740.9	1601.9	1572.0	1401.7
15°	2272.9	2287.8	2280.4	2271.4	2205.6	2119.0	2021.8	1841.0	1676.6	1639.3	1433.1
17.5°	2335.6	2346.1	2347.6	2347.6	2289.3	2204.1	2110.0	1932.2	1751.4	1703.5	1463.0
20°	2364.0	2376.0	2383.5	2395.4	2347.6	2274.4	2178.7	2009.9	1821.6	1767.8	1491.3
22.5°	2377.5	2387.9	2407.4	2434.3	2395.4	2334.2	2246.0	2081.6	1891.8	1835.0	1524.2
25°	2387.9	2401.4	2429.8	2480.6	2453.7	2401.4	2325.2	2163.8	1975.5	1917.2	1572.0
27.5°	2416.3	2432.8	2459.7	2520.9	2488.1	2462.7	2408.9	2252.0	2063.7	2003.9	1630.3
30°	2515.0	2528.4	2526.9	2565.8	2525.4	2518.0	2480.6	2337.1	2148.9	2089.1	1699.1
32.5°	2694.3	2707.7	2674.9	2659.9	2571.7	2573.2	2558.3	2428.3	2250.5	2189.2	1778.3
35°	2887.1	2902.0	2858.7	2833.3	2685.3	2642.0	2649.5	2541.9	2364.0	2302.8	1876.9
37.5°	3058.9	3076.8	3039.5	3002.1	2852.7	2752.6	2751.1	2668.9	2494.0	2431.3	1986.0
40°	3153.0	3174.0	3196.4	3175.5	3018.6	2908.0	2860.2	2798.9	2622.6	2558.3	2104.0
42.5°	3197.9	3256.2	3296.5	3283.1	3154.5	3042.5	2985.7	2934.9	2779.5	2716.7	2244.5
45°	3072.4	3073.8	3159.0	3232.2	3208.3	3133.6	3123.2	3087.3	2958.8	2899.0	2402.9
47.5°	2915.4	2903.5	2963.3	3093.3	3160.5	3179.9	3241.2	3256.2	3163.5	3103.7	2564.3
50°	2538.9	2546.3	2740.6	2927.4	3058.9	3184.4	3324.9	3429.5	3374.2	3317.4	2734.6
52.5°	2065.2	2083.1	2305.8	2716.7	2924.4	3139.6	3374.2	3602.8	3589.4	3535.6	2905.0
55°	1655.7	1684.1	1920.2	2365.5	2752.6	3039.5	3395.1	3761.2	3812.0	3762.7	3072.4
57.5°	1265.7	1295.6	1494.3	1951.6	2532.9	2876.6	3380.2	3900.2	4019.8	3988.4	3226.3
60°	953.4	983.3	1110.3	1582.5	2257.9	2694.3	3305.5	3991.4	4206.6	4173.7	3338.3
62.5°	682.9	706.8	801.0	1231.3	1923.2	2477.6	3121.7	3992.9	4312.6	4285.8	3392.1
65°	491.6	491.6	567.8	878.7	1609.4	2217.6	2843.7	3809.1	4290.2	4282.8	3354.8
67.5°	354.2	357.1	418.4	614.2	1283.6	1902.3	2483.6	3481.8	4116.9	4154.3	3220.3
70°	251.0	258.5	286.9	428.9	969.8	1501.8	2098.0	3052.9	3804.6	3870.3	2960.3
72.5°	194.3	198.7	218.2	298.9	708.3	1116.3	1672.2	2574.7	3387.7	3462.4	2606.1
75°	149.4	153.9	168.9	219.7	508.1	783.0	1188.0	1997.9	2731.6	2864.6	2093.6
77.5°	109.1	115.1	125.5	159.9	295.9	497.6	720.3	1123.7	1507.8	1570.5	1096.8
80°	50.8	58.3	73.2	103.1	159.9	234.6	255.5	433.4	724.8	757.6	594.7
82.5°	28.4	35.9	41.8	62.8	80.7	83.7	86.7	109.1	273.5	301.9	249.6
85°	13.4	17.9	19.4	26.9	26.9	23.9	28.4	20.9	44.8	53.8	52.3
87.5°	0.0	1.5	3.0	7.5	6.0	4.5	4.5	4.5	4.5	6.0	4.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6	1298.6
2.5°	1307.5	1288.1	1243.3	1204.4	1179.0	1156.6	1126.7	1113.3	1089.4	1093.9	1080.4
5°	1315.0	1279.2	1200.0	1126.7	1072.9	1025.1	972.8	942.9	910.0	907.1	896.6
7.5°	1319.5	1264.2	1150.6	1047.5	965.3	892.1	821.9	783.0	742.7	733.7	724.8
10°	1315.0	1241.8	1099.8	965.3	856.3	765.1	685.9	636.6	594.7	584.3	575.3
12.5°	1319.5	1229.8	1052.0	889.1	759.1	656.0	566.4	515.5	476.7	466.2	460.3
15°	1330.0	1222.4	1011.7	820.4	672.5	557.4	469.2	425.9	394.5	384.0	381.1
17.5°	1338.9	1214.9	968.3	753.1	585.8	470.7	394.5	358.6	331.7	321.3	318.3
20°	1350.9	1204.4	925.0	688.9	509.6	402.0	334.7	303.3	282.4	275.0	273.5
22.5°	1361.3	1197.0	884.6	624.6	439.3	346.7	289.9	264.5	249.6	242.1	242.1
25°	1388.2	1200.0	850.3	564.9	387.0	303.3	255.5	236.1	224.2	219.7	219.7
27.5°	1419.6	1211.9	823.4	514.1	342.2	270.5	231.6	215.2	209.2	203.2	204.7
30°	1464.4	1235.8	805.4	472.2	309.3	245.1	212.2	200.2	194.3	192.8	192.8
32.5°	1521.2	1274.7	804.0	445.3	285.4	225.6	198.7	188.3	185.3	183.8	183.8
35°	1588.5	1309.0	795.0	433.4	270.5	212.2	188.3	180.8	179.3	179.3	179.3
37.5°	1669.2	1365.8	789.0	416.9	263.0	204.7	180.8	174.8	174.8	174.8	174.8
40°	1752.9	1412.1	780.0	402.0	260.0	200.2	176.3	168.9	168.9	168.9	168.9
42.5°	1853.0	1479.4	777.1	394.5	255.5	197.3	170.4	161.4	162.9	162.9	164.4
45°	1974.0	1555.6	775.6	387.0	254.0	194.3	164.4	153.9	155.4	153.9	153.9
47.5°	2096.6	1643.8	780.0	382.5	252.5	191.3	159.9	146.4	146.4	145.0	145.0
50°	2225.1	1724.5	783.0	378.1	249.6	185.3	152.4	140.5	137.5	134.5	136.0
52.5°	2346.1	1799.2	784.5	370.6	240.6	176.3	146.4	133.0	128.5	124.0	125.5
55°	2467.1	1870.9	787.5	361.6	228.6	167.4	139.0	125.5	119.5	113.6	113.6
57.5°	2576.2	1933.7	780.0	339.2	215.2	158.4	131.5	116.6	107.6	101.6	101.6
60°	2650.9	1978.5	757.6	306.3	197.3	147.9	124.0	107.6	97.1	92.6	92.6
62.5°	2686.8	1986.0	717.3	252.5	174.8	137.5	115.1	98.6	89.7	86.7	86.7
65°	2652.4	1953.1	654.5	189.8	150.9	125.5	106.1	91.2	82.2	74.7	74.7
67.5°	2532.9	1860.4	567.8	143.5	128.5	113.6	97.1	83.7	73.2	67.2	67.2
70°	2292.3	1667.7	439.3	115.1	109.1	98.6	88.2	74.7	65.8	58.3	58.3
72.5°	1977.0	1413.6	309.3	92.6	92.6	83.7	74.7	65.8	56.8	50.8	50.8
75°	1516.7	1046.0	207.7	74.7	76.2	70.2	61.3	53.8	47.8	43.3	43.3
77.5°	827.9	517.0	127.0	55.3	56.8	53.8	47.8	43.3	40.3	35.9	35.9
80°	402.0	227.1	73.2	38.9	40.3	38.9	35.9	31.4	31.4	28.4	28.4
82.5°	168.9	85.2	38.9	26.9	26.9	23.9	22.4	22.4	22.4	20.9	20.9
85°	41.8	16.4	16.4	14.9	14.9	14.9	13.4	13.4	13.4	10.5	12.0
87.5°	6.0	6.0	6.0	6.0	6.0	6.0	4.5	1.5	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)