

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: LUMARK

Report Number: P884780

Luminaire Tested: **NAV-SB5D-730-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884780  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5D-730-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

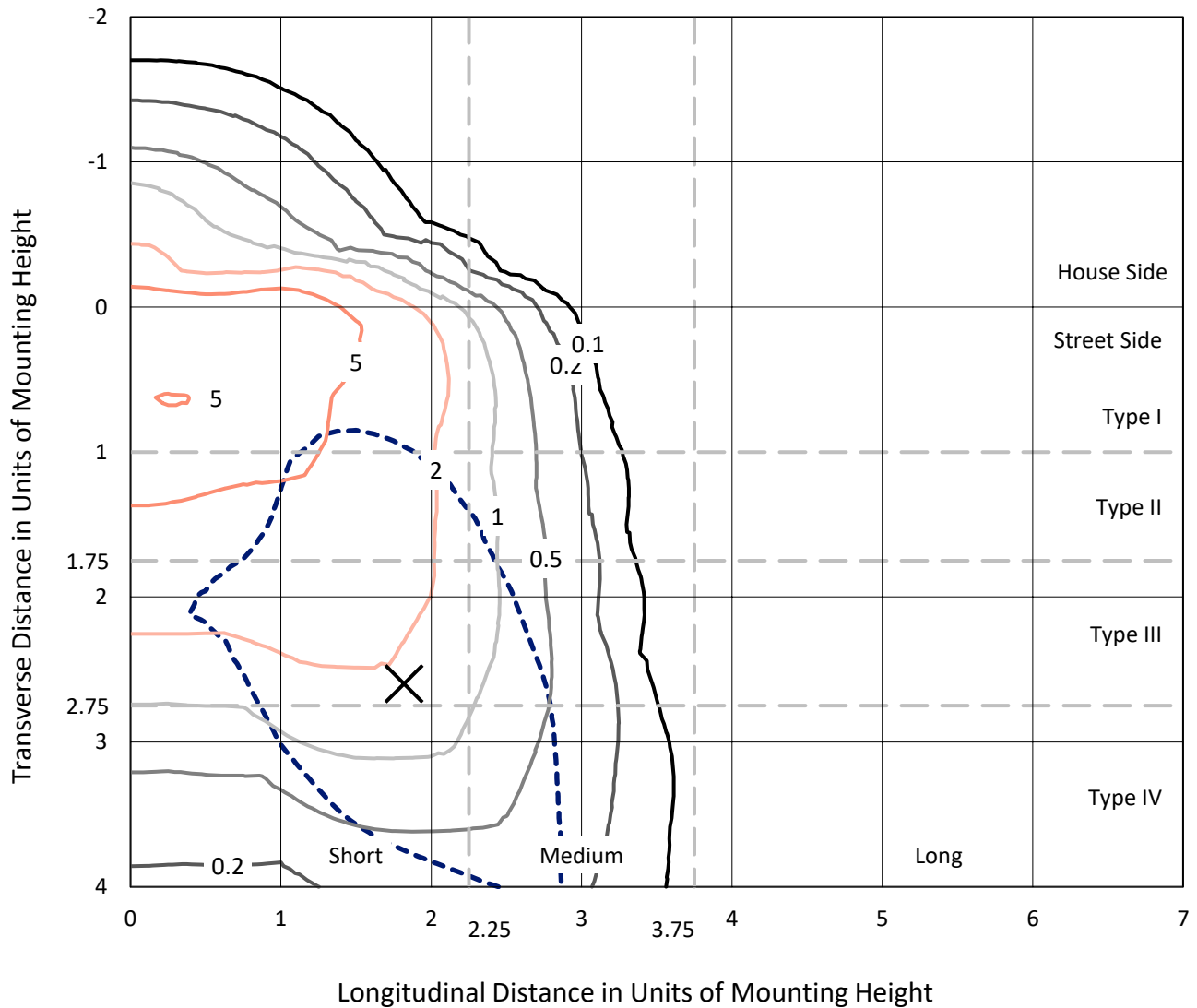
Lumens per Lamp: N/A  
Luminaire Lumens: 38486 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 364.9  
Input Voltage (V): 120.0  
Input Current (Ain): 3.094  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 3.28  
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

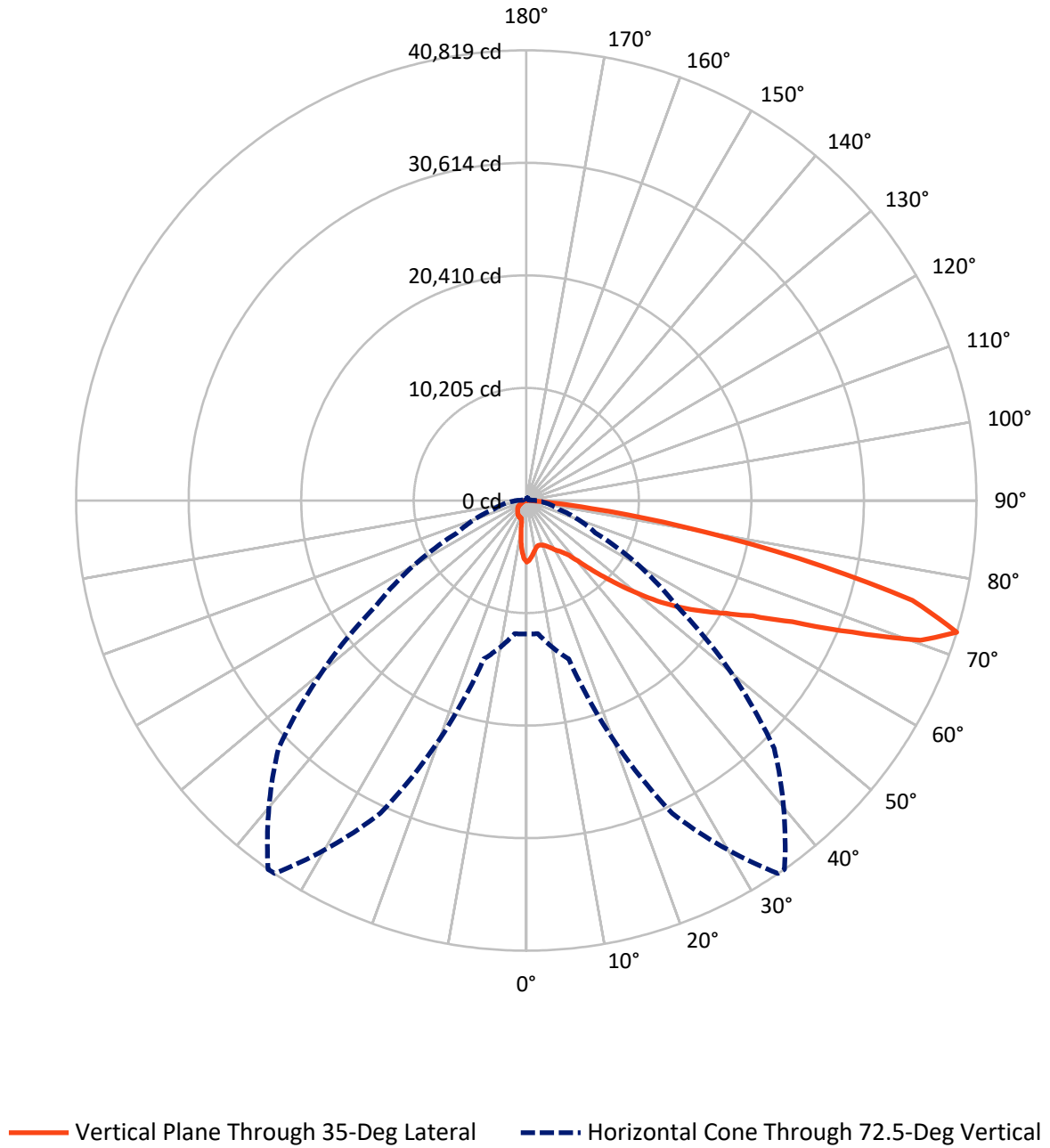
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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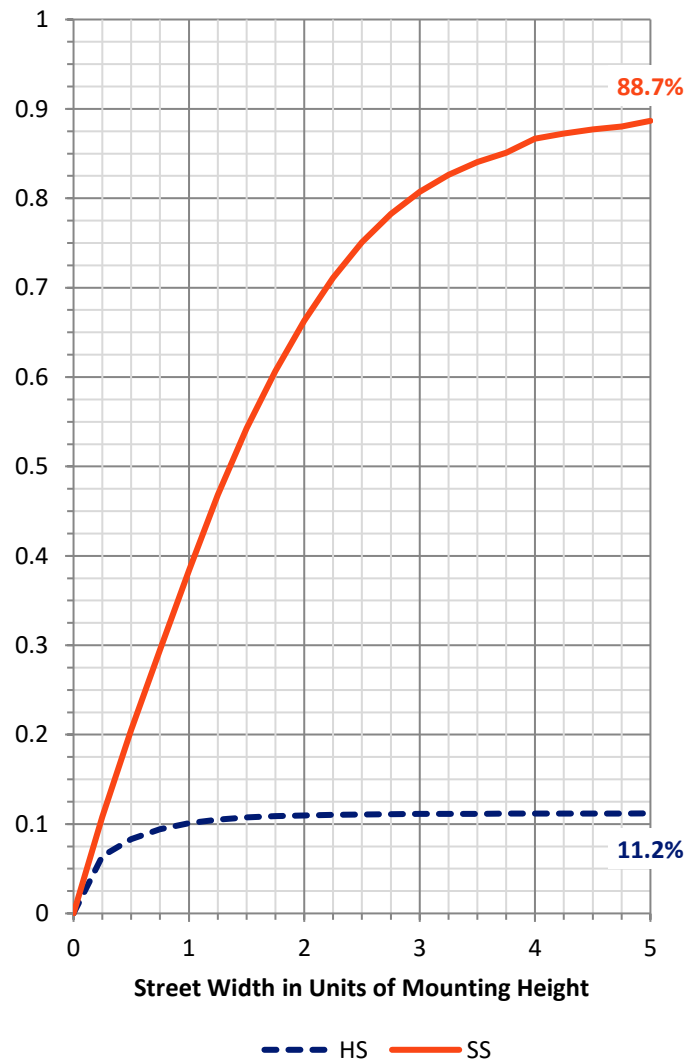
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4331.4	0.0	4331.4
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	34154.6	0.0	34154.6
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	38486.0	0.0	38486.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	458.4	1.2
10°-20°	1072.3	2.8
20°-30°	1741.9	4.5
30°-40°	2906.3	7.6
40°-50°	5498.8	14.3
50°-60°	8737.5	22.7
60°-70°	10809.0	28.1
70°-80°	6718.9	17.5
80°-90°	543.0	1.4
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°	38486.0	100.0
0°-180°	38486.0	100.0

**Coefficient of Utilization**



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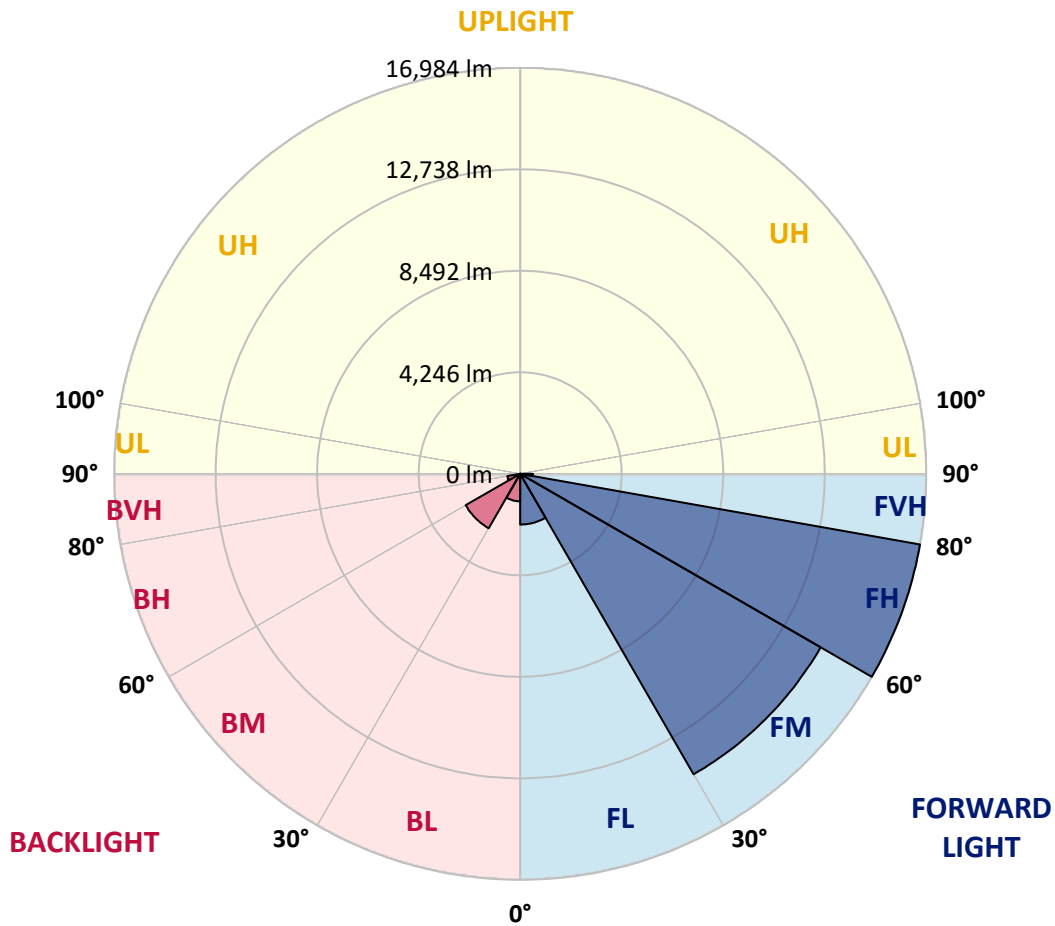
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2121.6	5.5			
FM (30°-60°)	14513.1	37.7			
FH (60°-80°)	16984.3	44.1			G5
FVH (80°-90°)	535.6	1.4			G4/750
BL (0°-30°)	1150.9	3.0	B3/2500		
BM (30°-60°)	2629.6	6.8	B3/5000		
BH (60°-80°)	543.5	1.4	B2/1000		G2/1000
BVH (80°-90°)	7.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9
2.5°	5329.8	5374.9	5383.3	5397.4	5397.4	5414.4	5442.6	5482.0	5546.9	5580.7	5603.3
5°	4912.4	4946.2	4988.5	5022.4	5087.2	5095.7	5205.7	5312.8	5462.3	5575.1	5654.1
7.5°	4492.2	4531.7	4588.1	4669.9	4754.5	4779.9	4946.2	5126.7	5363.6	5575.1	5707.6
10°	4196.1	4198.9	4249.7	4331.5	4466.8	4497.9	4700.9	4957.5	5253.6	5541.3	5758.4
12.5°	4029.7	4049.5	4072.0	4134.1	4263.8	4283.5	4500.7	4802.4	5143.6	5521.5	5817.6
15°	4029.7	4043.8	4057.9	4089.0	4193.3	4210.2	4402.0	4703.7	5087.2	5530.0	5913.5
17.5°	4072.0	4094.6	4083.3	4120.0	4230.0	4241.2	4410.4	4675.5	5084.4	5583.6	6060.1
20°	4173.6	4190.5	4167.9	4190.5	4300.5	4323.0	4497.9	4729.1	5132.4	5676.6	6243.4
22.5°	4334.3	4342.8	4289.2	4306.1	4418.9	4447.1	4650.1	4881.4	5248.0	5826.1	6488.8
25°	4537.3	4554.3	4472.5	4492.2	4599.4	4633.2	4867.3	5109.8	5431.3	6031.9	6801.8
27.5°	4771.4	4779.9	4709.4	4706.5	4844.7	4892.7	5129.5	5391.8	5676.6	6291.4	7196.6
30°	5039.3	5064.7	4997.0	4985.7	5160.6	5200.0	5434.1	5738.7	6037.6	6680.5	7757.8
32.5°	5250.8	5270.5	5231.1	5259.3	5436.9	5467.9	5803.5	6229.3	6604.4	7233.2	8522.0
35°	5555.4	5566.6	5476.4	5527.2	5730.2	5809.1	6308.3	6917.4	7317.8	7927.0	9520.2
37.5°	6658.0	6658.0	6274.4	6023.5	6218.0	6288.5	6999.2	7783.1	8197.7	8857.5	10777.9
40°	8183.6	8158.2	7597.0	7083.8	7058.4	7196.6	7983.4	8874.5	9334.1	9974.3	12193.6
42.5°	9810.7	9771.2	9007.0	8499.4	8414.8	8462.7	9119.8	10219.6	10687.7	11336.3	13716.4
45°	11254.5	11243.2	10543.9	9861.5	9709.2	9861.5	10538.2	11793.1	12128.7	12811.1	15236.3
47.5°	12464.3	12464.3	11953.9	11508.3	11429.4	11519.6	12458.7	13538.7	13507.7	14381.9	16716.8
50°	13857.4	13846.1	13361.0	13169.3	13251.1	13378.0	14669.5	15377.3	14934.6	15924.4	18039.4
52.5°	14833.1	14900.8	14734.4	14703.4	15120.7	15340.7	16914.2	17176.5	16212.0	17388.0	19029.2
55°	15605.7	15684.7	15876.5	16093.6	16897.3	17184.9	19088.4	18882.6	17280.8	18657.0	19598.8
57.5°	16699.9	16587.1	16883.2	17311.8	18611.8	18958.7	21194.9	20492.8	18140.9	19686.2	19660.9
60°	18028.1	18045.0	18095.8	18637.2	20323.6	20769.1	23270.4	22015.5	18693.6	20317.9	18972.8
62.5°	19624.2	19649.6	19753.9	20585.8	22621.8	23042.0	25481.3	23262.0	18947.4	20140.3	17196.2
65°	19514.2	19621.4	20786.0	23631.4	26115.8	26530.3	28061.6	24136.2	18563.9	18516.0	14001.2
67.5°	17777.1	17952.0	19900.6	27269.2	31383.5	31846.0	31180.5	24308.2	16908.6	14398.8	9133.9
70°	15498.6	15560.6	17904.0	30540.3	37483.1	37951.2	33972.2	22416.0	12830.9	8031.3	4091.8
72.5°	12103.3	12117.4	14866.9	31298.9	40793.8	40819.1	31781.1	16640.7	6900.5	3085.1	1421.3
75°	8646.0	8561.4	9957.3	25382.6	35889.8	36177.5	23826.0	7805.7	2636.7	1457.9	707.8
77.5°	4636.0	4729.1	5634.3	15053.0	24793.2	25283.9	13000.1	2250.3	1342.3	992.6	468.1
80°	1432.5	1511.5	2309.6	6892.0	14043.5	14339.6	4819.3	1001.1	936.2	707.8	307.4
82.5°	451.2	468.1	1077.2	2896.1	5828.9	5964.2	1395.9	566.8	640.1	468.1	180.5
85°	129.7	132.5	479.4	1080.1	1441.0	1469.2	392.0	220.0	366.6	290.5	93.1
87.5°	14.1	45.1	180.5	180.5	126.9	124.1	42.3	47.9	104.3	36.7	16.9
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9	5577.9
2.5°	5589.2	5592.0	5555.4	5493.3	5425.6	5369.2	5298.7	5242.3	5202.9	5191.6	5211.3
5°	5628.7	5608.9	5504.6	5315.7	5090.1	4895.5	4678.3	4506.3	4393.5	4345.6	4362.5
7.5°	5687.9	5631.5	5403.1	5030.8	4599.4	4215.9	3826.7	3525.0	3333.2	3237.3	3251.4
10°	5738.7	5625.9	5233.9	4619.1	3959.2	3378.3	2853.8	2490.0	2287.0	2191.1	2193.9
12.5°	5786.6	5623.0	5013.9	4131.3	3237.3	2526.7	2038.8	1858.4	1802.0	1782.2	1776.6
15°	5876.8	5631.5	4737.6	3572.9	2518.2	1909.1	1731.5	1728.6	1739.9	1734.3	1731.5
17.5°	6000.9	5640.0	4424.5	2980.7	1943.0	1683.5	1675.1	1700.4	1717.4	1708.9	1706.1
20°	6161.6	5673.8	4091.8	2394.2	1669.4	1627.1	1646.9	1669.4	1683.5	1669.4	1666.6
22.5°	6387.2	5733.0	3728.0	1923.2	1582.0	1593.3	1610.2	1635.6	1649.7	1629.9	1627.1
25°	6663.6	5826.1	3369.9	1672.2	1539.7	1553.8	1579.2	1607.4	1624.3	1604.6	1601.7
27.5°	7021.7	5975.5	3039.9	1615.8	1497.4	1505.9	1542.5	1584.8	1607.4	1582.0	1582.0
30°	7540.6	6220.9	2755.1	1641.2	1472.0	1452.3	1503.0	1562.3	1587.6	1565.1	1562.3
32.5°	8228.7	6567.7	2580.3	1680.7	1460.7	1390.2	1438.2	1514.3	1556.6	1542.5	1542.5
35°	9131.1	7095.1	2512.6	1725.8	1452.3	1325.4	1359.2	1441.0	1514.3	1528.4	1528.4
37.5°	10225.2	7828.3	2532.3	1745.6	1426.9	1271.8	1288.7	1359.2	1455.1	1500.2	1511.5
40°	11468.8	8682.7	2645.1	1725.8	1398.7	1226.7	1229.5	1283.1	1367.7	1435.4	1457.9
42.5°	12751.9	9681.0	2853.8	1652.5	1373.3	1187.2	1178.7	1215.4	1271.8	1319.7	1339.5
45°	13973.0	10707.4	3059.7	1551.0	1342.3	1147.7	1128.0	1142.1	1153.4	1173.1	1184.4
47.5°	15038.9	11429.4	3000.5	1457.9	1300.0	1102.6	1068.8	1063.1	1029.3	1026.5	1023.7
50°	15774.9	11587.3	2664.9	1364.9	1238.0	1051.9	998.3	964.4	905.2	877.0	879.8
52.5°	16009.0	10964.1	2177.0	1271.8	1136.5	984.2	908.0	854.5	781.1	755.8	752.9
55°	15698.8	9743.0	1739.9	1159.0	995.5	893.9	809.3	738.8	679.6	648.6	648.6
57.5°	14940.2	8189.2	1376.1	1026.5	846.0	792.4	707.8	637.3	586.6	555.5	549.9
60°	13682.5	6502.9	1088.5	868.6	721.9	682.4	595.0	549.9	504.8	468.1	459.7
62.5°	11773.4	4641.7	854.5	688.1	603.5	558.4	507.6	473.8	420.2	369.4	361.0
65°	9187.5	2839.7	659.9	504.8	485.0	462.5	431.5	400.4	335.6	284.8	276.4
67.5°	5795.0	1345.1	470.9	380.7	383.5	372.2	358.1	332.8	284.8	239.7	234.1
70°	2552.1	651.4	310.2	290.5	284.8	284.8	296.1	287.6	242.5	200.2	191.8
72.5°	868.6	349.7	231.2	220.0	205.9	203.0	248.2	239.7	194.6	155.1	146.6
75°	454.0	234.1	169.2	157.9	124.1	149.5	197.4	186.1	138.2	101.5	93.1
77.5°	296.1	166.4	115.6	101.5	70.5	98.7	146.6	129.7	81.8	50.8	45.1
80°	186.1	110.0	67.7	47.9	33.8	53.6	79.0	56.4	31.0	11.3	8.5
82.5°	98.7	56.4	25.4	16.9	14.1	16.9	19.7	14.1	5.6	0.0	0.0
85°	39.5	19.7	8.5	5.6	2.8	0.0	5.6	2.8	0.0	0.0	0.0
87.5°	14.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	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)