

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: P969474

Luminaire Tested: **NAV-SB5D-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969474
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47375.5 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
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



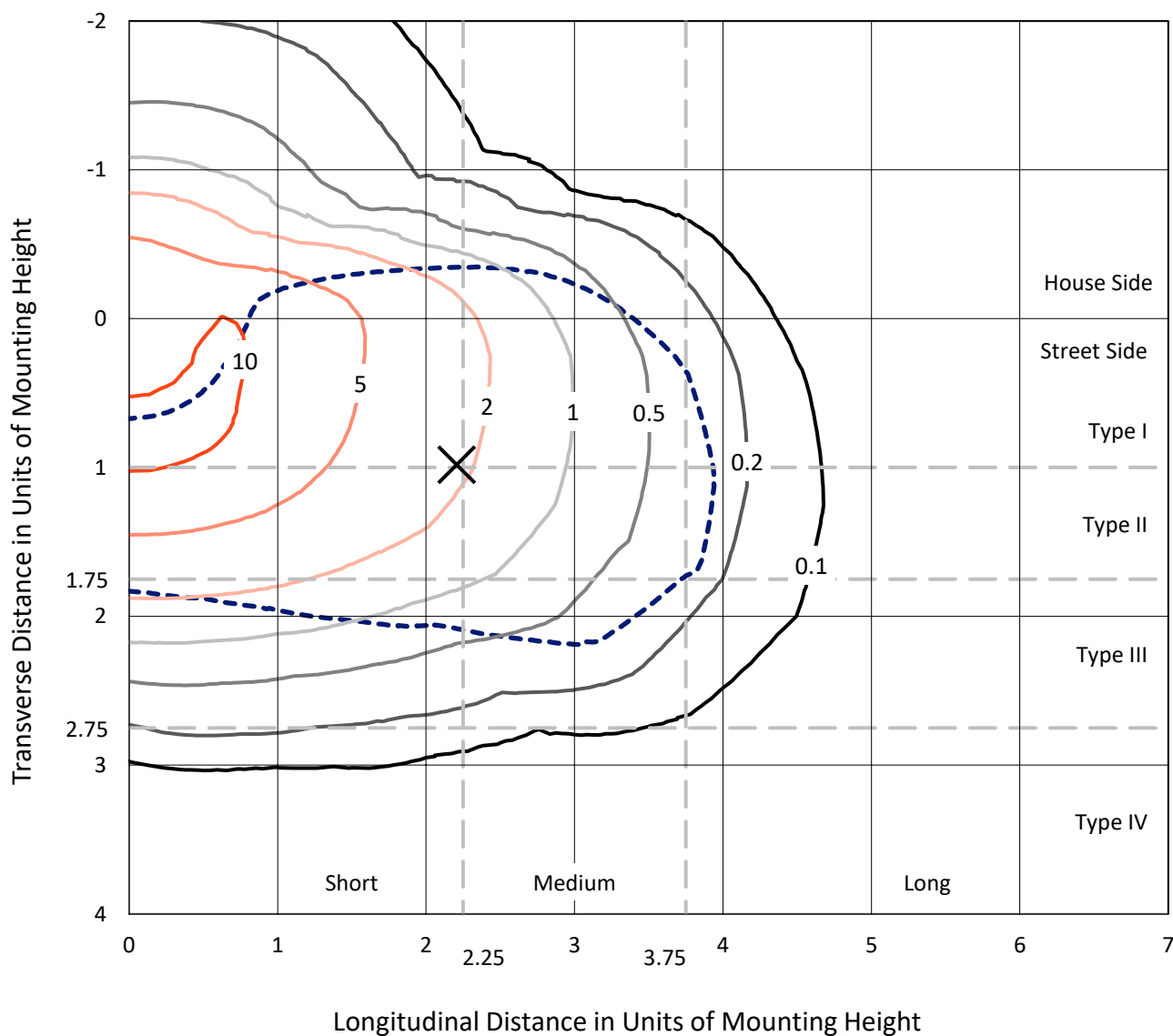
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

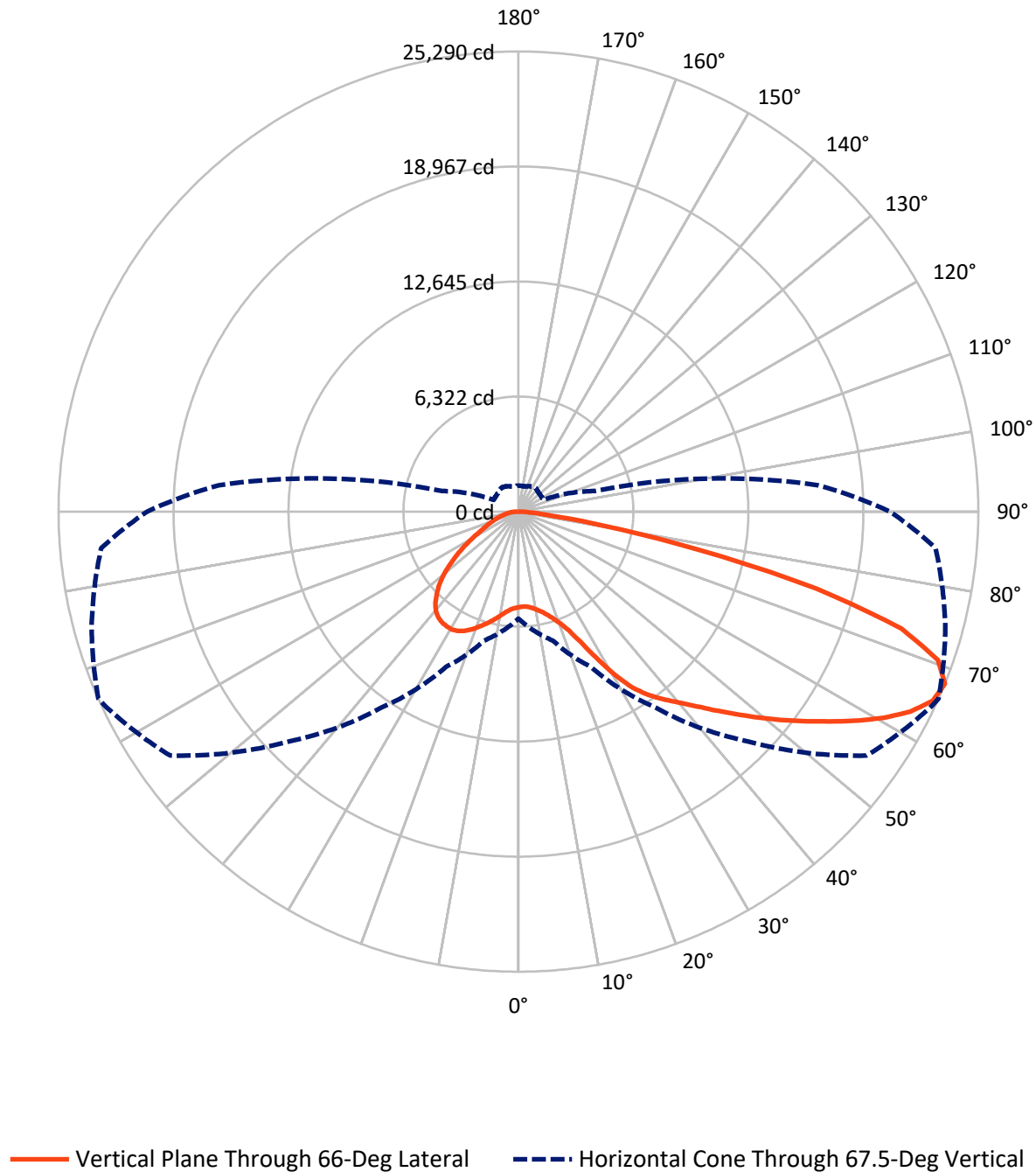


Based on 25 foot mounting height. Maximum calculated value = 11.9 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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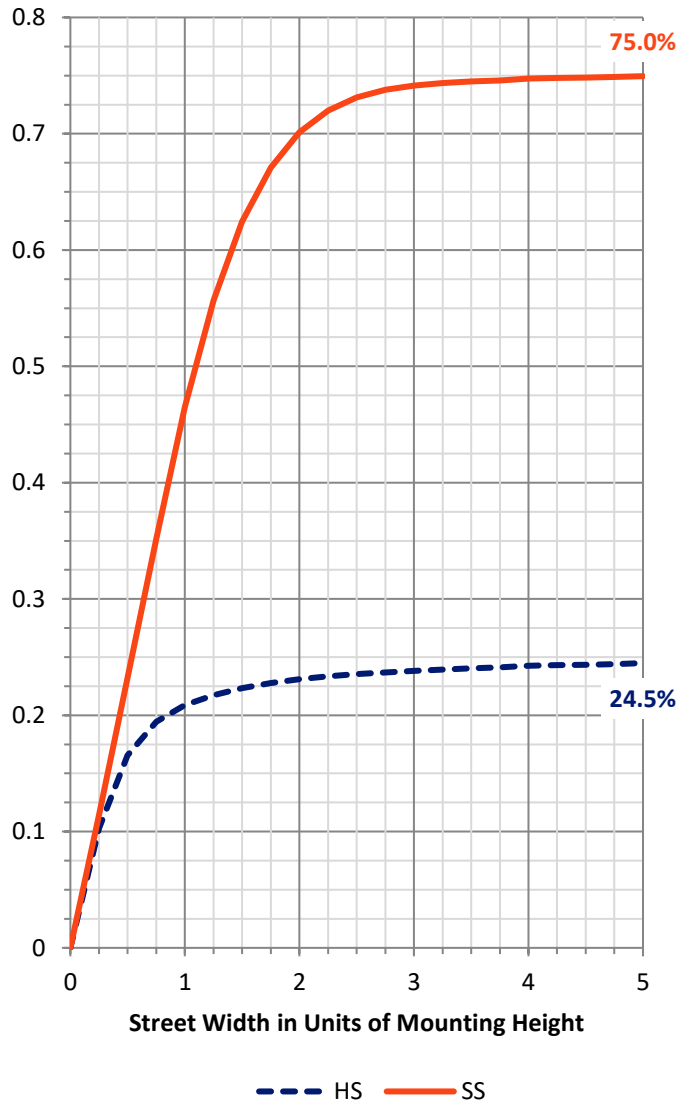
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11779.8	0.0	11779.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	35595.7	0.0	35595.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	47375.5	0.0	47375.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.0	1.1
10°-20°	1721.2	3.6
20°-30°	3317.5	7.0
30°-40°	5816.9	12.3
40°-50°	8647.8	18.3
50°-60°	10961.9	23.1
60°-70°	10726.0	22.6
70°-80°	5116.4	10.8
80°-90°	546.8	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°	47375.5	100.0
0°-180°	47375.5	100.0

Coefficient of Utilization



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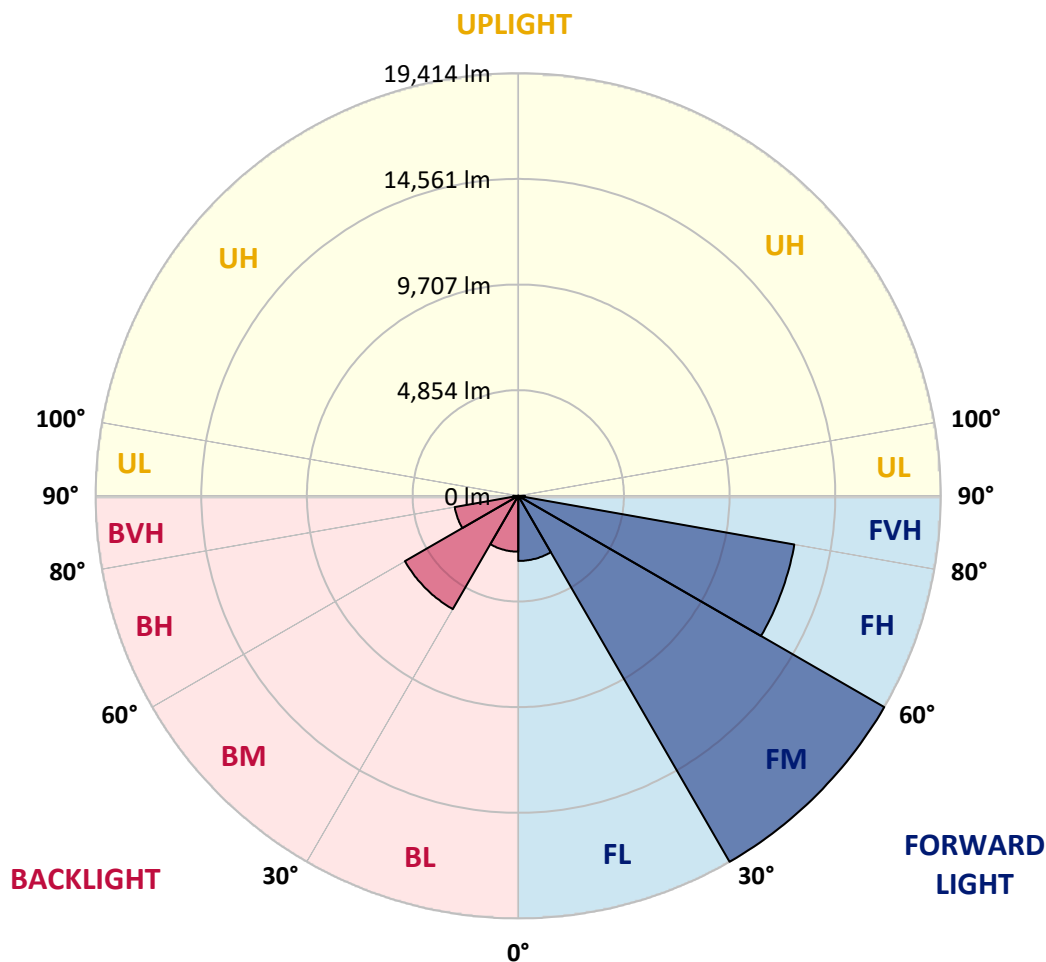
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2993.7	6.3			
FM	(30°-60°)	19414.1	41.0			
FH	(60°-80°)	12878.0	27.2			G5
FVH	(80°-90°)	310.0	0.7			G3/500
BL	(0°-30°)	2566.1	5.4	B4/5000		
BM	(30°-60°)	6012.5	12.7	B4/8500		
BH	(60°-80°)	2964.4	6.3	B4/5000		G4/5000
BVH	(80°-90°)	236.8	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6
2.5°	5199.8	5229.7	5222.2	5209.8	5207.3	5212.2	5219.7	5227.2	5224.7	5237.1	5257.0
5°	5184.9	5214.8	5212.2	5212.2	5222.2	5242.2	5254.6	5267.1	5254.6	5269.5	5296.9
7.5°	5194.8	5217.2	5227.2	5237.1	5262.0	5299.4	5329.3	5356.6	5341.7	5359.1	5394.0
10°	5321.8	5339.2	5349.2	5349.2	5366.6	5408.9	5438.8	5488.6	5476.1	5503.5	5548.3
12.5°	5553.2	5570.7	5570.7	5560.7	5573.1	5600.6	5610.5	5665.3	5642.8	5687.7	5732.5
15°	5837.1	5871.9	5844.4	5827.0	5832.0	5859.4	5857.0	5899.3	5876.8	5914.1	5954.0
17.5°	6150.6	6195.5	6150.6	6148.2	6138.2	6168.0	6170.6	6207.9	6168.0	6195.5	6222.9
20°	6521.6	6583.8	6546.5	6558.9	6536.4	6548.9	6561.3	6616.2	6553.8	6573.8	6566.4
22.5°	7044.2	7118.9	7079.1	7126.4	7111.4	7101.5	7099.0	7196.1	7099.0	7106.5	7034.3
25°	7805.9	7895.6	7825.9	7890.6	7890.6	7922.9	7960.3	8084.7	7922.9	7875.6	7688.9
27.5°	8931.0	9020.6	8883.8	8923.5	8911.1	8990.8	8950.9	9259.5	9085.4	9008.2	8632.3
30°	10285.2	10444.4	10185.5	10175.6	10163.2	10290.1	10347.4	10551.5	10374.7	10297.6	9844.5
32.5°	11748.8	11915.5	11606.9	11517.2	11470.0	11547.1	11499.8	11664.1	11542.1	11422.7	10862.6
35°	13297.0	13461.2	13167.6	12993.3	12804.1	12642.3	12473.0	12515.4	12400.9	12219.1	11639.2
37.5°	14760.6	15061.8	14750.7	14563.9	14215.4	13899.3	13426.4	13229.8	13122.8	12956.0	12371.0
40°	16251.6	16423.4	16186.9	16027.5	15649.2	15153.9	14397.2	13981.5	13837.1	13675.3	13180.0
42.5°	17349.3	17513.6	17386.7	17277.1	16980.9	16405.9	15427.7	14907.4	14698.4	14516.7	14096.0
45°	18220.5	18342.5	18262.8	18302.6	18175.7	17618.1	16495.5	15900.6	15684.0	15462.5	15131.5
47.5°	18571.5	18700.9	18827.8	19064.3	19280.9	18870.1	17643.0	16975.9	16747.0	16520.4	16194.3
50°	18531.6	18663.5	19032.0	19534.8	20206.8	20069.9	18852.7	18120.9	17909.3	17650.5	17349.3
52.5°	18213.0	18362.4	18835.3	19671.7	20742.0	20968.5	20084.9	19303.2	19104.2	18795.5	18494.3
55°	17376.6	17466.3	18175.7	19360.5	20868.9	21595.7	21292.1	20562.7	20363.7	19933.0	19604.5
57.5°	15825.9	15955.4	16988.4	18521.6	20550.3	22021.4	22352.5	21887.0	21695.4	21075.5	20732.1
60°	13802.2	14008.9	15191.2	17112.8	19738.8	22018.9	23315.8	23188.8	23029.5	22200.6	21842.1
62.5°	11512.3	11751.2	12888.8	15121.5	18320.0	21394.1	23918.2	24279.1	24196.9	23238.6	22780.6
65°	8841.4	9005.6	10138.3	12545.3	16112.2	20052.5	23987.8	25023.3	25038.2	24027.6	23271.0
67.5°	5886.8	6359.7	7343.0	9413.9	13155.1	17859.6	23375.5	25145.3	25289.6	24299.0	23024.5
70°	2872.5	3494.7	4458.0	6118.3	9413.9	14496.8	21775.0	24144.6	24465.7	23507.5	21556.0
72.5°	1192.3	1393.9	1919.1	3019.3	5403.9	9782.3	18559.0	21431.5	22026.3	20829.1	18123.4
75°	804.0	871.1	1097.7	1548.3	2461.7	4824.0	13384.1	15980.3	16938.5	15731.4	12858.9
77.5°	619.8	662.2	799.0	1082.8	1463.6	1824.5	7163.7	9630.5	10125.8	9374.1	6690.8
80°	487.9	520.2	597.4	789.0	1038.0	975.7	2441.9	4363.4	4649.7	3900.4	2150.7
82.5°	423.1	435.6	428.1	535.2	689.5	570.0	801.6	1610.5	1777.2	1289.3	701.9
85°	306.2	341.0	356.0	331.1	365.9	288.7	328.6	570.0	627.3	560.1	395.8
87.5°	124.4	184.2	226.5	214.0	134.4	82.1	102.1	166.8	191.7	209.1	129.5
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°	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6	5254.6
2.5°	5259.6	5277.0	5289.4	5304.4	5314.3	5329.3	5359.1	5376.5	5379.0	5391.5	5388.9
5°	5306.8	5331.7	5359.1	5399.0	5443.8	5481.1	5538.3	5578.2	5593.1	5605.5	5603.1
7.5°	5408.9	5443.8	5493.5	5563.2	5628.0	5677.7	5747.4	5794.7	5842.0	5859.4	5861.9
10°	5560.7	5610.5	5682.7	5777.3	5847.0	5911.7	5983.8	6023.7	6071.0	6091.0	6100.9
12.5°	5749.9	5802.2	5896.7	6028.6	6093.4	6138.2	6163.1	6153.2	6163.1	6180.5	6185.5
15°	5966.4	6023.7	6130.7	6272.6	6317.4	6277.6	6222.9	6173.1	6165.6	6170.6	6188.0
17.5°	6222.9	6265.2	6389.6	6509.1	6476.8	6312.5	6192.9	6113.3	6073.5	6061.0	6078.5
20°	6581.3	6581.3	6683.3	6758.0	6541.4	6262.6	6076.0	5946.5	5864.4	5829.6	5822.1
22.5°	7016.8	6977.1	7041.7	6989.5	6529.0	6123.2	5864.4	5640.4	5515.9	5466.1	5458.6
25°	7569.4	7522.2	7504.7	7181.2	6439.4	5901.7	5481.1	5209.8	5100.2	5072.8	5077.8
27.5°	8403.4	8283.8	8057.3	7285.7	6275.2	5553.2	5033.1	4781.6	4719.4	4721.9	4729.3
30°	9513.4	9274.5	8719.5	7303.1	6006.3	5060.4	4575.0	4395.8	4366.0	4378.4	4420.7
32.5°	10541.5	10315.0	9396.5	7223.5	5593.1	4577.5	4164.4	4044.9	4000.1	4015.0	4034.9
35°	11348.0	11285.8	10023.8	7111.4	5085.3	4124.5	3796.0	3693.9	3606.8	3586.9	3601.7
37.5°	12109.7	12084.7	10494.2	6954.6	4582.5	3803.4	3499.8	3365.3	3238.4	3168.7	3171.1
40°	12946.0	12921.2	10802.9	6713.2	4136.9	3524.7	3233.4	3056.7	2899.8	2772.9	2785.3
42.5°	13886.9	13740.0	10949.7	6367.2	3758.6	3288.2	3016.9	2777.9	2571.3	2454.3	2461.7
45°	14914.9	14583.9	10947.2	5926.7	3440.0	3071.6	2785.3	2446.8	2255.2	2145.6	2140.6
47.5°	16005.2	15390.4	10812.8	5438.8	3131.4	2832.6	2426.9	2168.1	2041.1	1973.8	1959.0
50°	17130.2	16144.6	10583.8	4878.7	2815.3	2561.4	2202.9	2026.1	1929.0	1866.8	1844.5
52.5°	18188.1	16829.1	10307.5	4244.0	2494.1	2297.4	2103.3	1966.5	1864.4	1794.7	1764.8
55°	19171.3	17419.0	9916.8	3594.3	2232.8	2120.7	2056.0	1941.6	1824.5	1742.4	1710.0
57.5°	20045.0	17802.3	9242.1	2984.5	2046.1	1998.7	2006.2	1899.2	1764.8	1695.1	1650.2
60°	20771.8	18083.6	8244.0	2419.4	1894.2	1879.3	1929.0	1819.6	1662.8	1583.1	1548.3
62.5°	21207.5	18078.6	7019.4	1981.3	1764.8	1769.8	1827.1	1720.0	1560.7	1486.0	1463.6
65°	21170.1	17635.5	5675.2	1695.1	1640.3	1645.3	1720.0	1610.5	1476.1	1431.2	1428.7
67.5°	20420.9	16555.3	4353.5	1508.4	1503.5	1525.8	1612.9	1535.8	1423.8	1418.8	1426.3
70°	18392.2	14312.6	3136.3	1359.0	1361.5	1393.9	1508.4	1488.5	1396.4	1406.4	1403.8
72.5°	14748.1	10912.4	2105.8	1202.2	1204.8	1257.1	1408.9	1451.2	1369.0	1500.9	1520.9
75°	9822.2	6805.3	1354.1	1035.5	1038.0	1105.2	1321.7	1378.9	1294.4	1496.0	1508.4
77.5°	4719.4	3059.1	980.7	871.1	871.1	933.5	1142.5	1234.6	1102.7	1162.5	1065.4
80°	1630.4	1149.9	771.6	701.9	687.0	729.3	963.3	1070.3	950.9	876.2	821.4
82.5°	642.2	597.4	619.8	545.1	495.4	522.8	749.3	883.7	699.5	632.2	629.8
85°	368.4	388.3	438.1	360.9	286.3	321.1	550.1	634.7	527.7	465.5	475.4
87.5°	99.5	136.9	201.6	186.7	129.5	136.9	261.4	351.0	303.7	234.0	241.5
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)