

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: P842103

Luminaire Tested: **ARCH4-270-730-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-730-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26050 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

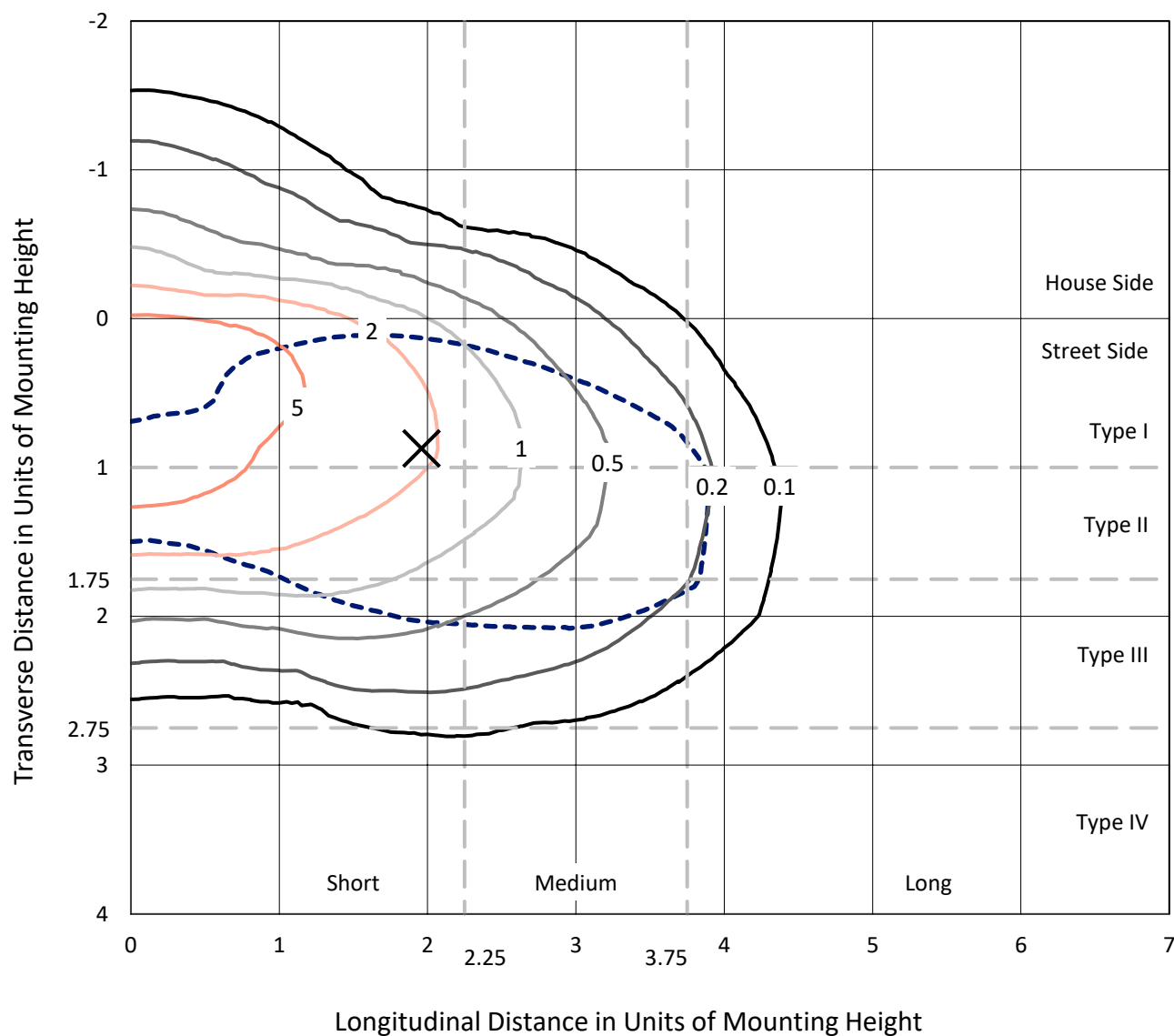
Input Watts (W): 269
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842103
 CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

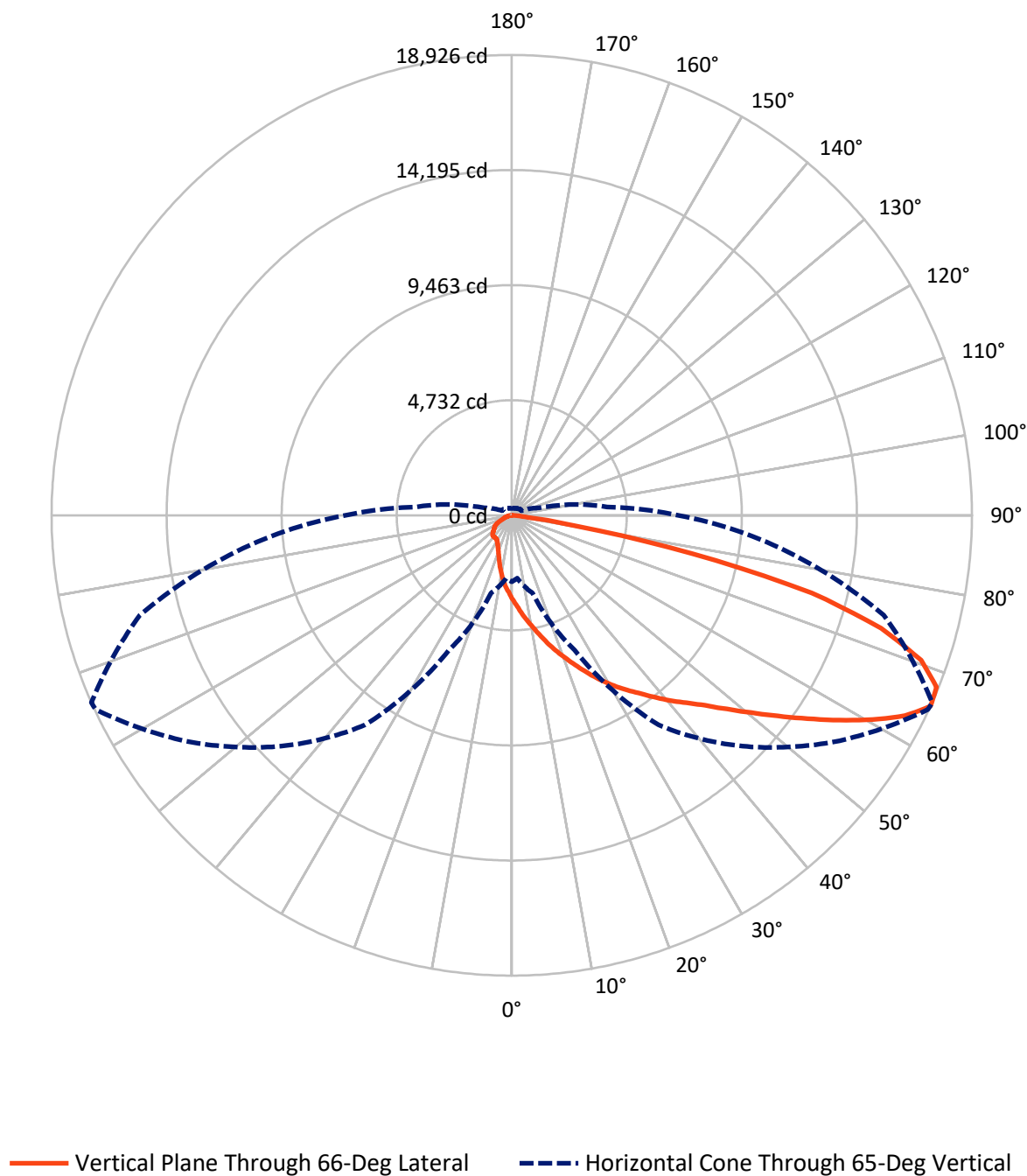
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type III - Short - N/A

REPORT NUMBER: P842103
CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842103

CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

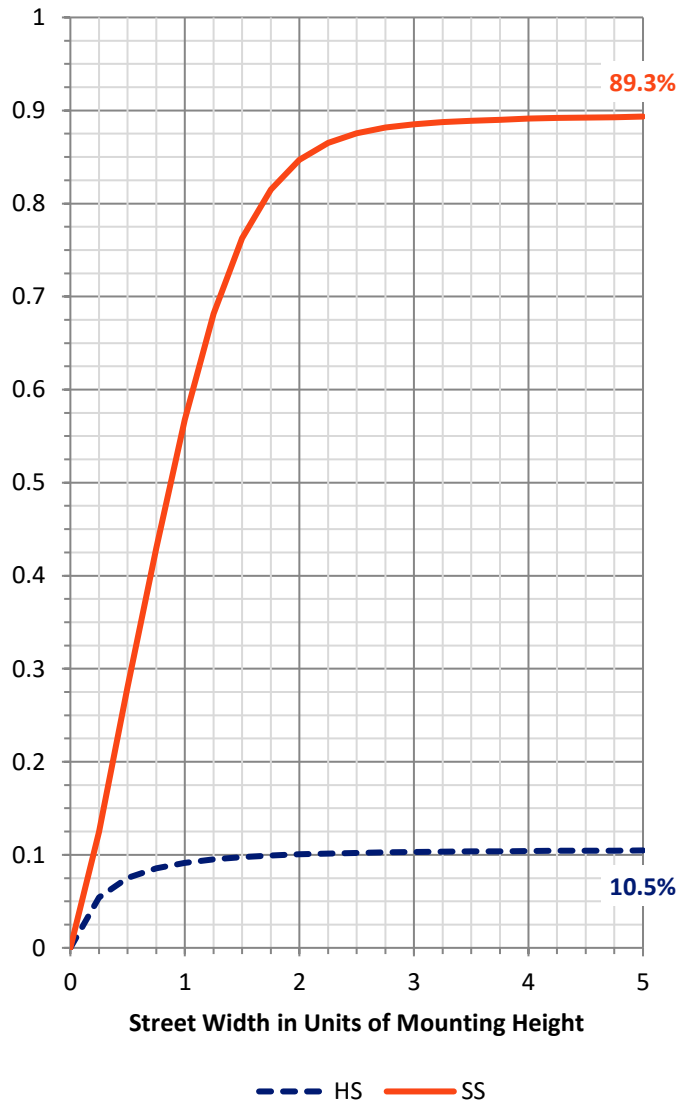
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2755.4	0.0	2755.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	23294.6	0.0	23294.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	26050.0	0.0	26050.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.3	1.3
10°-20°	1109.1	4.3
20°-30°	2006.6	7.7
30°-40°	3137.8	12.0
40°-50°	4760.1	18.3
50°-60°	6047.8	23.2
60°-70°	5651.1	21.7
70°-80°	2808.5	10.8
80°-90°	188.7	0.7
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°	26050.0	100.0
0°-180°	26050.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842103

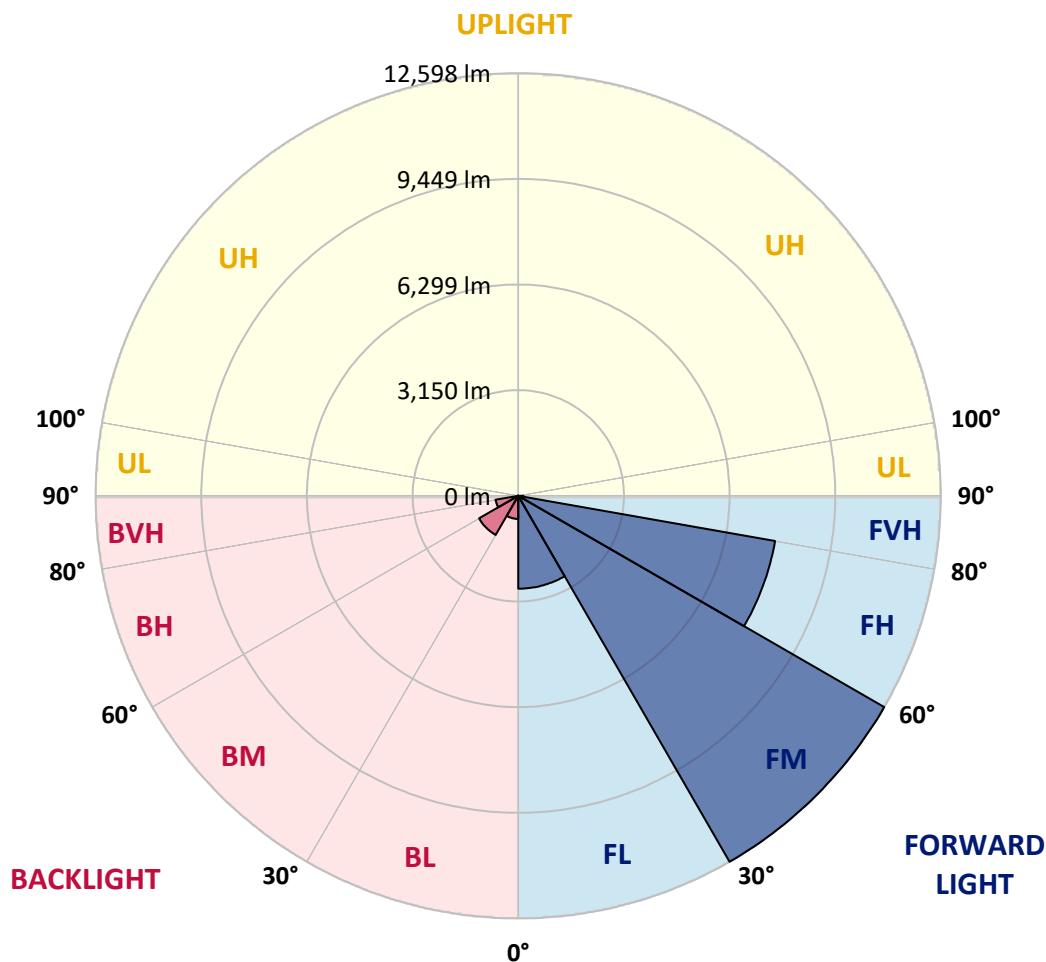
CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2767.8	10.6			
FM	(30°-60°)	12598.1	48.4			
FH	(60°-80°)	7773.4	29.8			G4/12000
FVH	(80°-90°)	155.3	0.6			G2/225
BL	(0°-30°)	688.1	2.6	B2/1000		
BM	(30°-60°)	1347.7	5.2	B2/2500		
BH	(60°-80°)	686.2	2.6	B2/1000		G2/1000
BVH	(80°-90°)	33.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



REPORT NUMBER: P842103

CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6
2.5°	4026.7	4059.5	4075.9	4081.4	3955.7	3901.1	3846.4	3720.8	3693.4	3622.4	3529.5
5°	4737.0	4780.7	4769.8	4747.9	4594.9	4420.1	4278.1	4043.1	4004.9	3835.5	3627.9
7.5°	5436.3	5474.6	5463.7	5381.7	5212.3	4966.5	4731.5	4387.3	4332.7	4059.5	3726.2
10°	6021.0	6053.7	6048.3	5966.3	5764.2	5463.7	5179.6	4720.6	4655.0	4267.1	3808.2
12.5°	6501.8	6545.5	6540.0	6485.4	6305.1	5977.3	5654.9	5103.1	5021.1	4518.5	3922.9
15°	6878.8	6933.4	6933.4	6911.5	6785.9	6512.7	6146.6	5523.8	5425.4	4808.0	4065.0
17.5°	7108.2	7151.9	7190.2	7228.4	7141.0	6933.4	6600.1	5944.5	5840.7	5092.1	4212.5
20°	7228.4	7272.1	7299.5	7381.4	7397.8	7294.0	7031.7	6359.7	6250.4	5414.5	4381.9
22.5°	7425.1	7463.4	7468.8	7539.9	7572.6	7600.0	7436.1	6769.5	6682.1	5769.6	4573.1
25°	7752.9	7796.7	7780.3	7813.0	7818.5	7851.3	7834.9	7239.4	7151.9	6173.9	4802.6
27.5°	8173.6	8228.3	8217.4	8184.6	8135.4	8108.1	8179.1	7714.7	7632.7	6578.3	5037.5
30°	8627.1	8692.7	8676.3	8610.7	8479.6	8364.9	8463.2	8162.7	8086.2	6993.5	5299.8
32.5°	9086.1	9162.6	9157.1	9047.8	8823.8	8627.1	8774.7	8583.4	8528.8	7441.5	5583.9
35°	9386.6	9484.9	9474.0	9408.4	9118.9	8949.5	9129.8	9015.1	8976.8	7987.9	5993.6
37.5°	9872.8	9976.7	9883.8	9719.9	9386.6	9299.2	9517.7	9501.3	9474.0	8567.0	6425.3
40°	11053.0	11206.0	10960.1	10288.1	9741.7	9665.2	9976.7	10042.2	10014.9	9140.7	6813.2
42.5°	12287.8	12517.3	12134.8	11206.0	10386.4	10107.8	10479.3	10572.2	10539.4	9632.4	7162.9
45°	13036.3	13134.7	12752.2	12031.0	11528.3	10643.2	11014.8	11167.7	11140.4	10222.5	7610.9
47.5°	13648.2	13610.0	13172.9	12686.6	12779.5	11397.2	11621.2	11921.7	11899.9	10872.7	8102.6
50°	13779.4	13692.0	13517.1	13211.1	13457.0	12162.1	12260.5	12779.5	12757.7	11593.9	8599.8
52.5°	12856.0	12741.3	13216.6	13473.4	13391.5	12719.4	12965.3	13719.3	13708.3	12375.2	9075.2
55°	10550.3	10457.5	11736.0	13063.6	13320.4	13112.8	13746.6	14697.3	14757.4	13205.7	9506.8
57.5°	8299.3	8201.0	9457.6	12036.5	13058.2	13473.4	14659.0	15817.3	15893.8	14107.2	9916.6
60°	6616.5	6469.0	7430.6	10419.2	12566.4	13752.1	15538.7	17046.6	17057.6	14932.2	10167.9
62.5°	4496.6	4332.7	5398.1	8370.3	11741.4	13795.8	16216.2	18106.6	18150.3	15549.6	10211.6
65°	2731.8	2595.2	3316.4	6113.8	10523.0	13424.2	16227.1	18887.9	18926.1	15833.7	9949.3
67.5°	1584.5	1529.8	1895.9	3808.2	8501.5	12424.4	15544.1	18767.7	18838.7	15713.5	9353.8
70°	923.4	917.9	1054.5	1885.0	5999.1	10441.1	14019.8	17756.9	17860.7	15085.2	8441.4
72.5°	677.5	688.4	743.1	1010.8	3474.9	7518.0	11872.6	15724.4	15882.9	13855.9	7141.0
75°	535.4	540.9	590.1	688.4	1824.9	4250.7	8894.9	12621.1	12746.7	11664.9	5578.4
77.5°	398.8	409.8	448.0	486.3	846.9	1950.5	5004.7	7774.8	7567.2	6403.4	2693.6
80°	289.6	316.9	333.3	349.7	448.0	754.0	1502.5	2710.0	2688.1	2797.4	1273.0
82.5°	185.8	207.6	224.0	234.9	267.7	360.6	448.0	606.5	655.6	1087.3	508.1
85°	82.0	92.9	103.8	125.7	114.7	125.7	185.8	120.2	103.8	163.9	92.9
87.5°	0.0	0.0	16.4	27.3	21.9	10.9	32.8	21.9	16.4	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P842103

CATALOG NUMBER: ARCH4-270-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6	3447.6
2.5°	3480.4	3420.3	3294.6	3174.4	3103.4	3010.5	2928.5	2852.0	2846.6	2824.7	2786.5
5°	3524.1	3409.3	3174.4	2950.4	2781.0	2600.7	2447.7	2327.5	2283.8	2251.0	2207.3
7.5°	3567.8	3387.5	3037.8	2710.0	2442.3	2190.9	2010.6	1846.7	1797.5	1753.8	1726.5
10°	3584.2	3349.2	2879.4	2442.3	2092.6	1824.9	1633.6	1513.4	1469.7	1447.9	1431.5
12.5°	3633.3	3327.4	2731.8	2190.9	1786.6	1540.8	1404.2	1333.1	1316.7	1300.4	1284.0
15°	3698.9	3327.4	2584.3	1945.1	1546.2	1349.5	1267.6	1218.4	1207.5	1202.0	1191.1
17.5°	3769.9	3327.4	2442.3	1737.4	1371.4	1223.9	1163.8	1136.4	1131.0	1125.5	1120.1
20°	3868.3	3332.8	2289.3	1557.1	1245.7	1131.0	1081.8	1049.0	1043.6	1038.1	1038.1
22.5°	3966.6	3343.8	2141.8	1420.6	1163.8	1060.0	999.9	967.1	956.1	956.1	956.1
25°	4092.3	3376.5	2005.2	1305.8	1092.7	994.4	917.9	890.6	885.1	885.1	879.7
27.5°	4239.8	3414.8	1885.0	1218.4	1021.7	917.9	841.4	814.1	803.2	803.2	797.7
30°	4398.3	3453.0	1786.6	1152.8	950.7	841.4	770.4	737.6	726.7	732.1	726.7
32.5°	4573.1	3507.7	1710.1	1109.1	885.1	775.8	710.3	672.0	666.6	666.6	661.1
35°	4868.1	3660.7	1699.2	1087.3	830.5	726.7	661.1	622.9	617.4	617.4	611.9
37.5°	5185.0	3835.5	1748.4	1076.3	786.8	683.0	622.9	584.6	579.1	579.1	579.1
40°	5452.7	3966.6	1803.0	1076.3	759.4	644.7	590.1	557.3	557.3	557.3	557.3
42.5°	5633.0	3977.6	1792.1	1076.3	737.6	617.4	568.2	535.4	535.4	540.9	535.4
45°	5900.8	4032.2	1748.4	1060.0	721.2	595.5	546.4	519.0	513.6	519.0	519.0
47.5°	6217.7	4130.5	1704.7	994.4	715.7	573.7	530.0	497.2	491.7	497.2	491.7
50°	6518.2	4218.0	1682.8	907.0	704.8	551.8	508.1	475.3	469.9	475.3	469.9
52.5°	6769.5	4256.2	1644.6	846.9	677.5	530.0	486.3	453.5	442.6	448.0	448.0
55°	6971.6	4245.3	1589.9	797.7	628.3	508.1	458.9	431.6	415.2	415.2	409.8
57.5°	7157.4	4250.7	1540.8	748.5	573.7	475.3	437.1	404.3	382.5	377.0	371.5
60°	7228.4	4223.4	1453.3	683.0	519.0	448.0	409.8	371.5	349.7	344.2	338.7
62.5°	7130.1	4125.1	1338.6	568.2	469.9	415.2	382.5	344.2	322.4	316.9	311.4
65°	6851.4	3939.3	1163.8	448.0	426.2	377.0	349.7	322.4	295.0	284.1	278.6
67.5°	6376.1	3671.6	945.2	360.6	377.0	344.2	327.8	295.0	262.3	251.3	245.9
70°	5698.6	3316.4	710.3	306.0	333.3	306.0	295.0	262.3	234.9	224.0	218.5
72.5°	4747.9	2742.8	497.2	262.3	289.6	267.7	256.8	234.9	207.6	191.2	191.2
75°	3589.6	1966.9	327.8	224.0	240.4	229.5	213.1	196.7	180.3	169.4	163.9
77.5°	1546.2	764.9	202.2	169.4	196.7	191.2	169.4	158.4	153.0	142.1	142.1
80°	666.6	311.4	125.7	125.7	142.1	136.6	131.1	120.2	120.2	114.7	109.3
82.5°	245.9	125.7	76.5	92.9	103.8	92.9	92.9	92.9	92.9	87.4	87.4
85°	60.1	38.2	38.2	54.6	60.1	54.6	60.1	54.6	54.6	54.6	49.2
87.5°	16.4	16.4	21.9	21.9	21.9	21.9	21.9	16.4	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)