

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: P836418

Luminaire Tested: **ARCH3-180-740-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836418
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17323 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 180.5
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

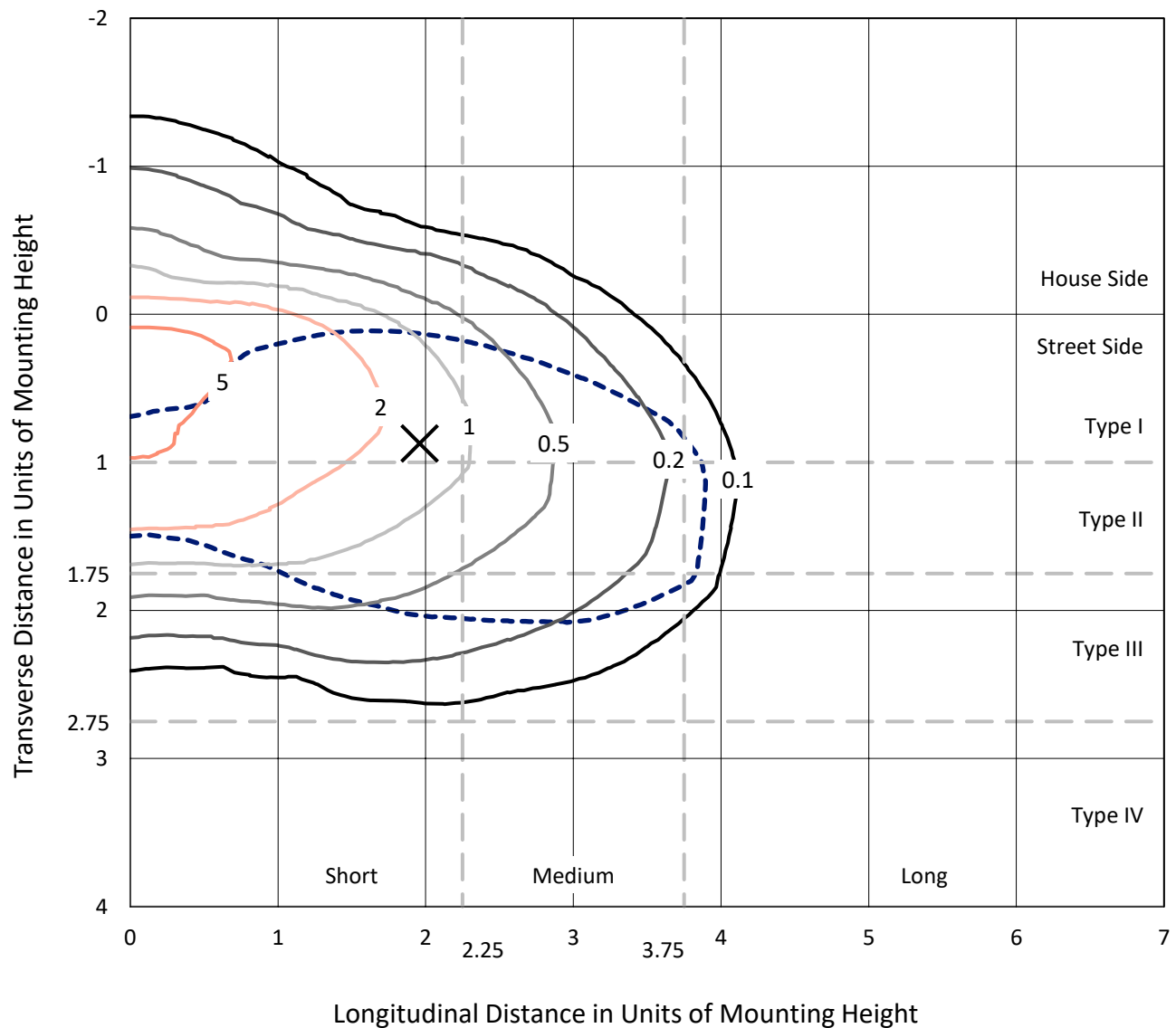


REPORT NUMBER: P836418

CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

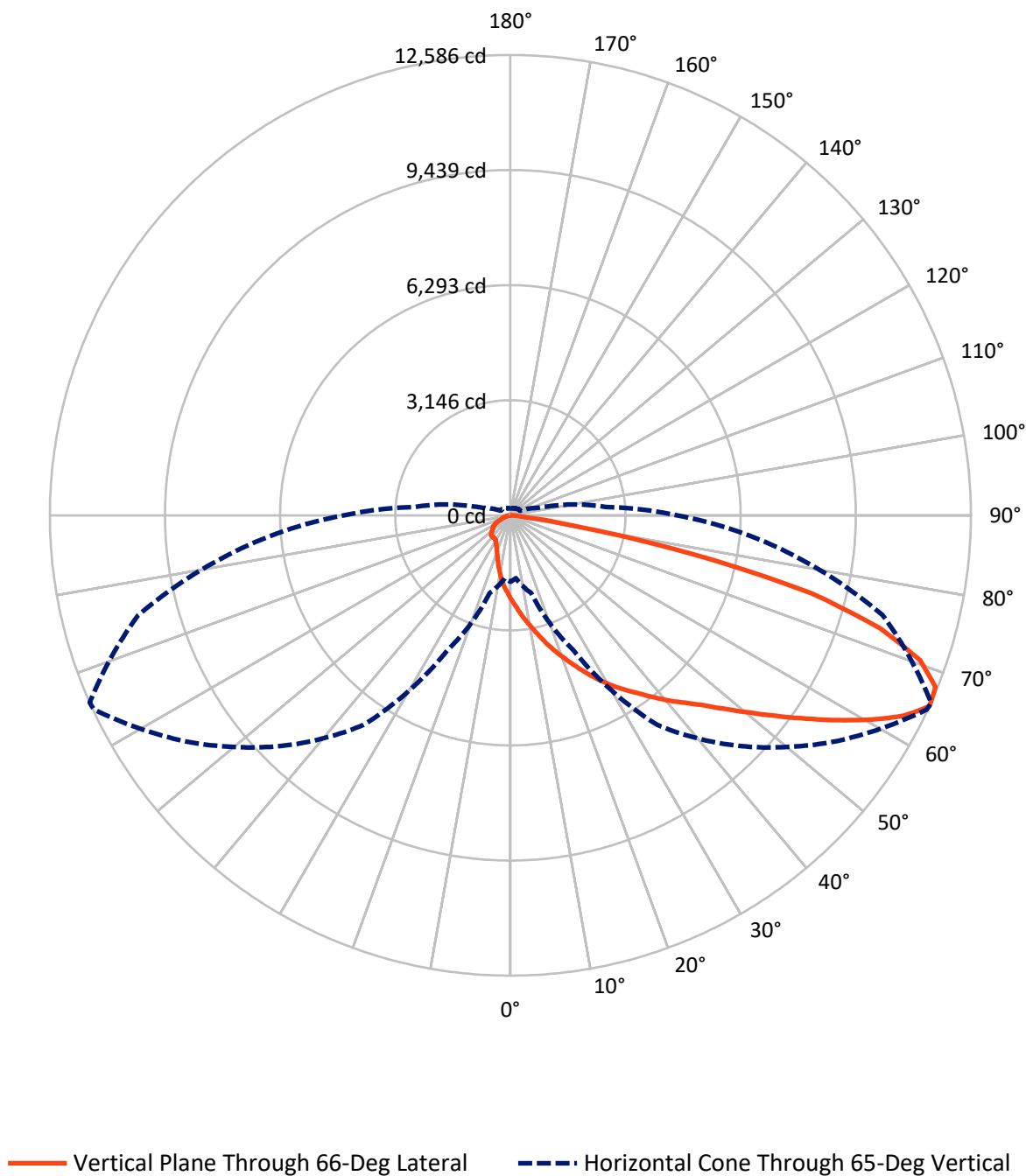
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
Type III - Short - N/A

REPORT NUMBER: P836418
CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836418

CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

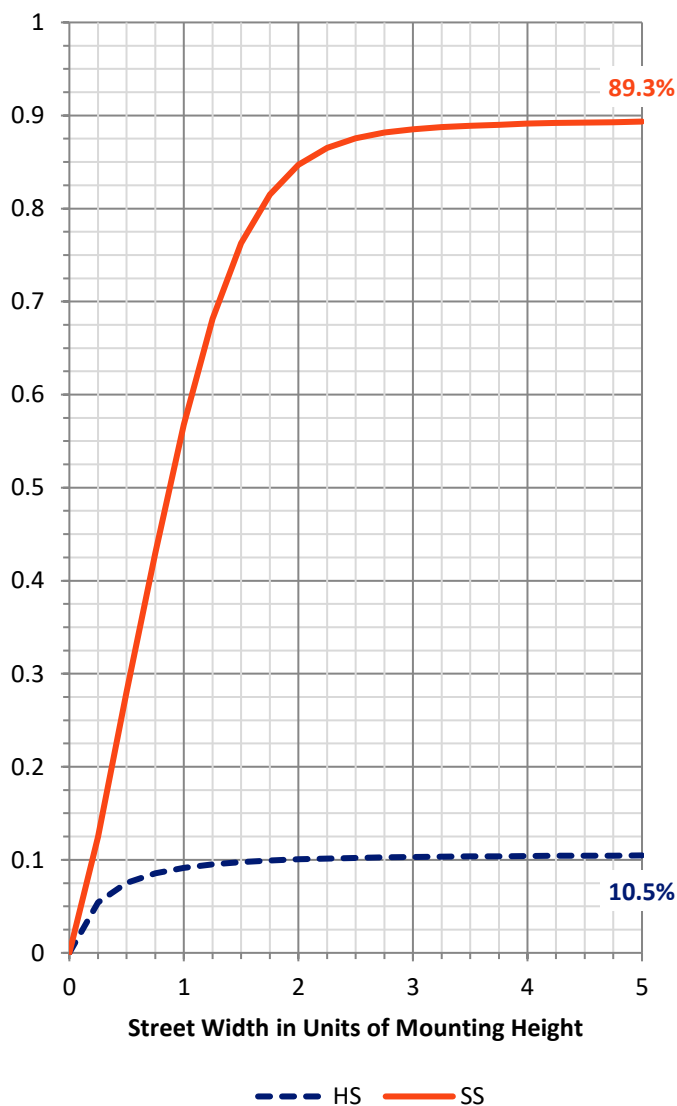
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1832.3	0.0	1832.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	15490.7	0.0	15490.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	17323.0	0.0	17323.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.3	1.3
10°-20°	737.5	4.3
20°-30°	1334.4	7.7
30°-40°	2086.6	12.0
40°-50°	3165.4	18.3
50°-60°	4021.7	23.2
60°-70°	3757.9	21.7
70°-80°	1867.7	10.8
80°-90°	125.5	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°	17323.0	100.0
0°-180°	17323.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836418

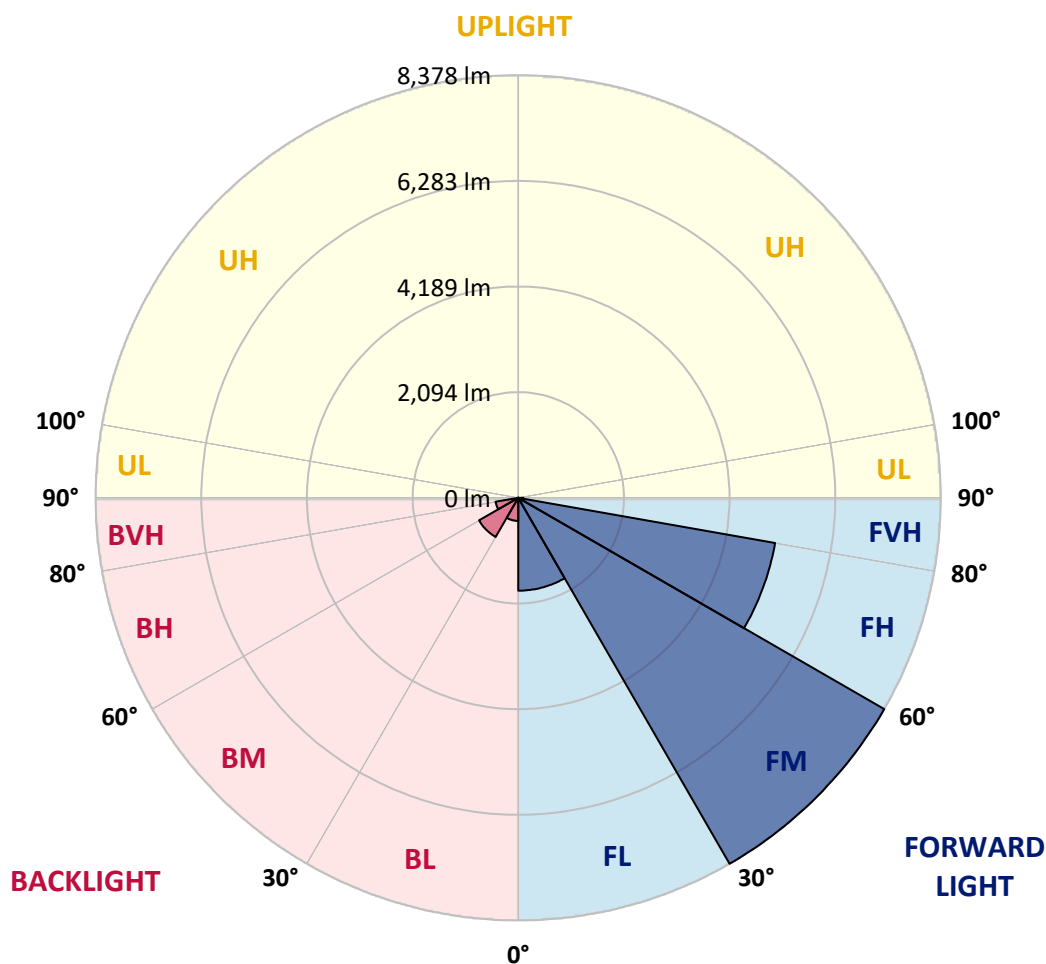
CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1840.6	10.6			
FM	(30°-60°)	8377.6	48.4			
FH	(60°-80°)	5169.3	29.8			G3/7500
FVH	(80°-90°)	103.3	0.6			G2/225
BL	(0°-30°)	457.6	2.6	B1/500		
BM	(30°-60°)	896.2	5.2	B1/1000		
BH	(60°-80°)	456.3	2.6	B1/500		G1/500
BVH	(80°-90°)	22.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



REPORT NUMBER: P836418

CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6
2.5°	2677.7	2699.5	2710.4	2714.1	2630.5	2594.2	2557.8	2474.3	2456.1	2408.9	2347.1
5°	3150.1	3179.1	3171.9	3157.3	3055.6	2939.3	2844.9	2688.6	2663.2	2550.6	2412.5
7.5°	3615.1	3640.6	3633.3	3578.8	3466.2	3302.7	3146.4	2917.5	2881.2	2699.5	2477.9
10°	4003.9	4025.7	4022.0	3967.5	3833.1	3633.3	3444.4	3139.2	3095.6	2837.6	2532.4
12.5°	4323.6	4352.7	4349.0	4312.7	4192.8	3974.8	3760.5	3393.5	3339.0	3004.7	2608.7
15°	4574.3	4610.6	4610.6	4596.1	4512.5	4330.9	4087.4	3673.3	3607.9	3197.3	2703.2
17.5°	4726.9	4756.0	4781.4	4806.8	4748.7	4610.6	4389.0	3953.0	3884.0	3386.2	2801.3
20°	4806.8	4835.9	4854.1	4908.6	4919.5	4850.4	4676.0	4229.1	4156.5	3600.6	2913.9
22.5°	4937.6	4963.1	4966.7	5013.9	5035.7	5053.9	4944.9	4501.6	4443.5	3836.8	3041.1
25°	5155.6	5184.7	5173.8	5195.6	5199.2	5221.0	5210.1	4814.1	4756.0	4105.6	3193.7
27.5°	5435.4	5471.7	5464.5	5442.7	5410.0	5391.8	5439.0	5130.2	5075.7	4374.5	3349.9
30°	5737.0	5780.6	5769.7	5726.1	5638.9	5562.6	5628.0	5428.1	5377.3	4650.6	3524.3
32.5°	6042.2	6093.0	6089.4	6016.7	5867.8	5737.0	5835.1	5707.9	5671.6	4948.5	3713.2
35°	6242.0	6307.4	6300.1	6256.5	6064.0	5951.3	6071.2	5994.9	5969.5	5311.9	3985.7
37.5°	6565.3	6634.4	6572.6	6463.6	6242.0	6183.9	6329.2	6318.3	6300.1	5697.0	4272.7
40°	7350.1	7451.9	7288.4	6841.5	6478.2	6427.3	6634.4	6678.0	6659.8	6078.5	4530.7
42.5°	8171.3	8323.9	8069.5	7451.9	6906.9	6721.6	6968.6	7030.4	7008.6	6405.5	4763.2
45°	8669.0	8734.4	8480.1	8000.5	7666.2	7077.6	7324.7	7426.4	7408.3	6797.9	5061.2
47.5°	9076.0	9050.5	8759.9	8436.5	8498.3	7579.0	7728.0	7927.8	7913.3	7230.2	5388.2
50°	9163.1	9105.0	8988.8	8785.3	8948.8	8087.7	8153.1	8498.3	8483.7	7709.8	5718.8
52.5°	8549.1	8472.8	8788.9	8959.7	8905.2	8458.3	8621.8	9123.2	9115.9	8229.4	6034.9
55°	7015.9	6954.1	7804.3	8687.2	8858.0	8719.9	9141.3	9773.5	9813.5	8781.7	6321.9
57.5°	5519.0	5453.6	6289.2	8004.1	8683.6	8959.7	9748.1	10518.4	10569.2	9381.1	6594.4
60°	4399.9	4301.8	4941.3	6928.7	8356.6	9145.0	10333.1	11335.9	11343.1	9929.8	6761.5
62.5°	2990.2	2881.2	3589.7	5566.2	7807.9	9174.0	10783.6	12040.7	12069.8	10340.3	6790.6
65°	1816.6	1725.8	2205.4	4065.6	6997.7	8927.0	10790.9	12560.3	12585.7	10529.3	6616.2
67.5°	1053.7	1017.3	1260.8	2532.4	5653.4	8262.1	10336.7	12480.3	12527.6	10449.3	6220.2
70°	614.0	610.4	701.2	1253.5	3989.3	6943.2	9323.0	11808.2	11877.2	10031.5	5613.4
72.5°	450.5	457.8	494.1	672.2	2310.8	4999.4	7895.1	10456.6	10562.0	9214.0	4748.7
75°	356.1	359.7	392.4	457.8	1213.5	2826.7	5915.0	8392.9	8476.5	7757.1	3709.6
77.5°	265.2	272.5	297.9	323.4	563.2	1297.1	3328.1	5170.2	5032.1	4258.2	1791.2
80°	192.6	210.7	221.6	232.5	297.9	501.4	999.2	1802.1	1787.6	1860.2	846.6
82.5°	123.5	138.1	149.0	156.2	178.0	239.8	297.9	403.3	436.0	723.0	337.9
85°	54.5	61.8	69.0	83.6	76.3	83.6	123.5	79.9	69.0	109.0	61.8
87.5°	0.0	0.0	10.9	18.2	14.5	7.3	21.8	14.5	10.9	10.9	10.9
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: P836418

CATALOG NUMBER: ARCH3-180-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6	2292.6
2.5°	2314.4	2274.4	2190.9	2110.9	2063.7	2001.9	1947.4	1896.6	1892.9	1878.4	1853.0
5°	2343.5	2267.2	2110.9	1962.0	1849.3	1729.4	1627.7	1547.8	1518.7	1496.9	1467.8
7.5°	2372.5	2252.6	2020.1	1802.1	1624.1	1456.9	1337.0	1228.1	1195.4	1166.3	1148.1
10°	2383.4	2227.2	1914.7	1624.1	1391.5	1213.5	1086.4	1006.4	977.4	962.8	951.9
12.5°	2416.1	2212.7	1816.6	1456.9	1188.1	1024.6	933.8	886.5	875.6	864.7	853.8
15°	2459.7	2212.7	1718.5	1293.5	1028.2	897.4	842.9	810.2	803.0	799.3	792.1
17.5°	2507.0	2212.7	1624.1	1155.4	912.0	813.9	773.9	755.7	752.1	748.5	744.8
20°	2572.4	2216.3	1522.3	1035.5	828.4	752.1	719.4	697.6	694.0	690.3	690.3
22.5°	2637.8	2223.6	1424.2	944.7	773.9	704.9	664.9	643.1	635.8	635.8	635.8
25°	2721.3	2245.4	1333.4	868.4	726.7	661.3	610.4	592.2	588.6	588.6	585.0
27.5°	2819.4	2270.8	1253.5	810.2	679.4	610.4	559.5	541.4	534.1	534.1	530.5
30°	2924.8	2296.2	1188.1	766.6	632.2	559.5	512.3	490.5	483.2	486.9	483.2
32.5°	3041.1	2332.6	1137.2	737.6	588.6	515.9	472.3	446.9	443.3	443.3	439.6
35°	3237.3	2434.3	1130.0	723.0	552.3	483.2	439.6	414.2	410.6	410.6	406.9
37.5°	3448.0	2550.6	1162.7	715.8	523.2	454.2	414.2	388.8	385.1	385.1	385.1
40°	3626.0	2637.8	1199.0	715.8	505.0	428.7	392.4	370.6	370.6	370.6	370.6
42.5°	3745.9	2645.0	1191.7	715.8	490.5	410.6	377.9	356.1	356.1	359.7	356.1
45°	3923.9	2681.4	1162.7	704.9	479.6	396.0	363.3	345.2	341.5	345.2	345.2
47.5°	4134.7	2746.8	1133.6	661.3	476.0	381.5	352.4	330.6	327.0	330.6	327.0
50°	4334.5	2804.9	1119.1	603.1	468.7	367.0	337.9	316.1	312.5	316.1	312.5
52.5°	4501.6	2830.3	1093.6	563.2	450.5	352.4	323.4	301.6	294.3	297.9	297.9
55°	4636.1	2823.1	1057.3	530.5	417.8	337.9	305.2	287.0	276.1	276.1	272.5
57.5°	4759.6	2826.7	1024.6	497.8	381.5	316.1	290.7	268.9	254.3	250.7	247.1
60°	4806.8	2808.5	966.5	454.2	345.2	297.9	272.5	247.1	232.5	228.9	225.3
62.5°	4741.4	2743.1	890.2	377.9	312.5	276.1	254.3	228.9	214.4	210.7	207.1
65°	4556.1	2619.6	773.9	297.9	283.4	250.7	232.5	214.4	196.2	188.9	185.3
67.5°	4240.0	2441.6	628.6	239.8	250.7	228.9	218.0	196.2	174.4	167.1	163.5
70°	3789.5	2205.4	472.3	203.5	221.6	203.5	196.2	174.4	156.2	149.0	145.3
72.5°	3157.3	1823.9	330.6	174.4	192.6	178.0	170.8	156.2	138.1	127.2	127.2
75°	2387.1	1308.0	218.0	149.0	159.9	152.6	141.7	130.8	119.9	112.6	109.0
77.5°	1028.2	508.7	134.4	112.6	130.8	127.2	112.6	105.4	101.7	94.5	94.5
80°	443.3	207.1	83.6	83.6	94.5	90.8	87.2	79.9	79.9	76.3	72.7
82.5°	163.5	83.6	50.9	61.8	69.0	61.8	61.8	61.8	61.8	58.1	58.1
85°	40.0	25.4	25.4	36.3	40.0	36.3	40.0	36.3	36.3	36.3	32.7
87.5°	10.9	10.9	14.5	14.5	14.5	14.5	14.5	10.9	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)