

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: P841874

Luminaire Tested: **ARCH4-240-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-240-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 940mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23978 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

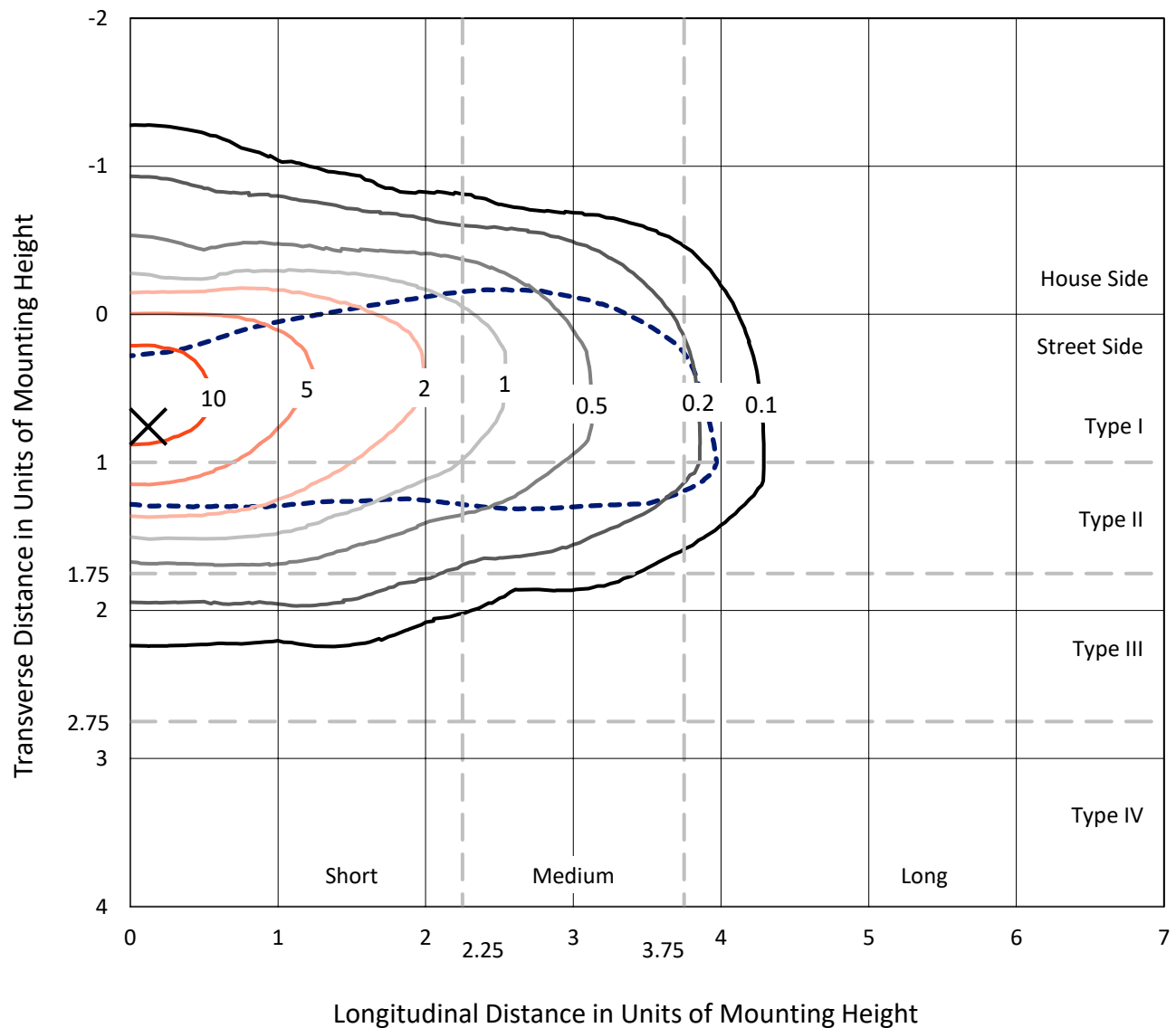
Input Watts (W): 240.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841874
CATALOG NUMBER: ARCH4-240-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

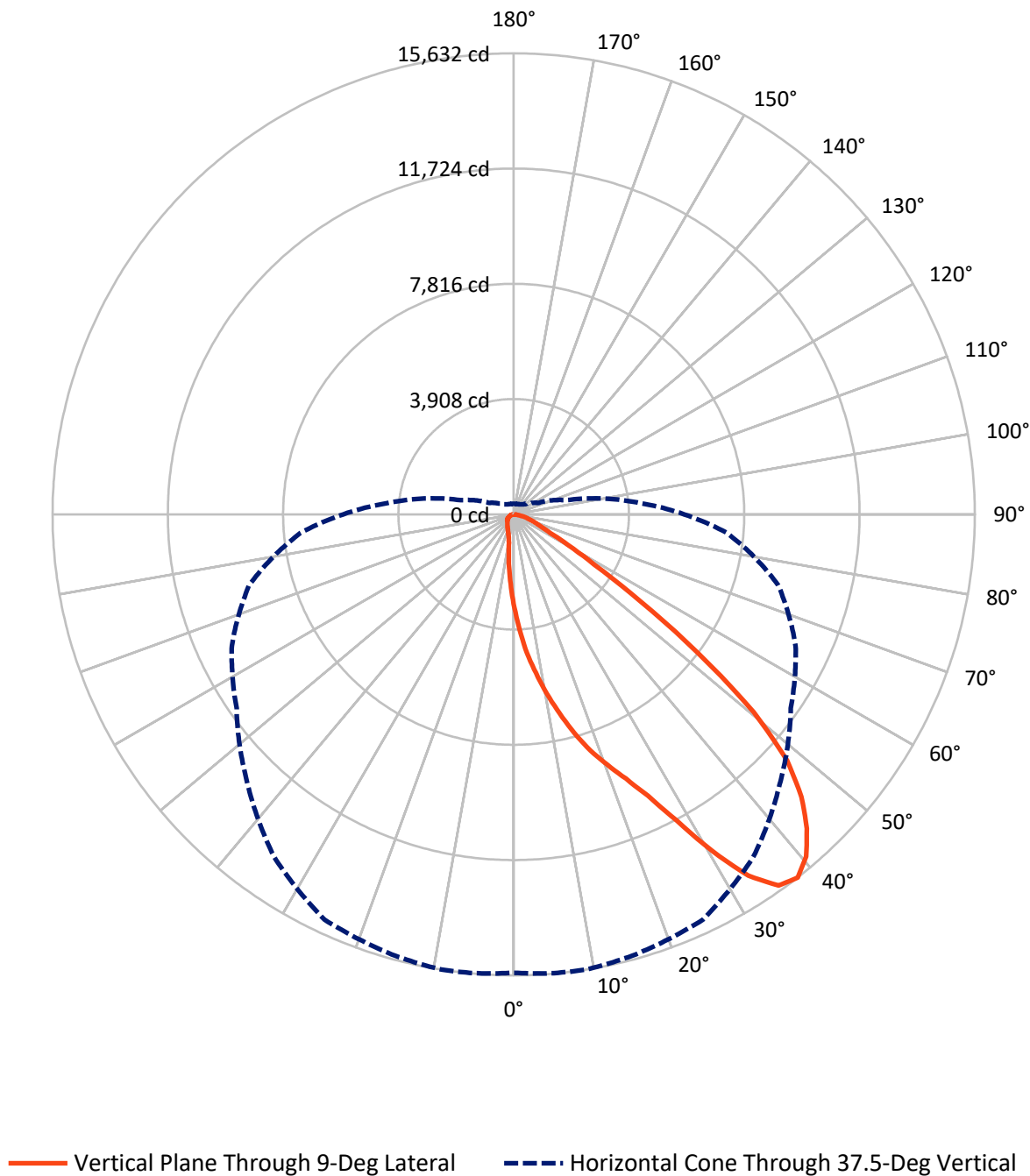
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14 fc
Type II - Short - N/A

REPORT NUMBER: P841874
CATALOG NUMBER: ARCH4-240-727-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841874

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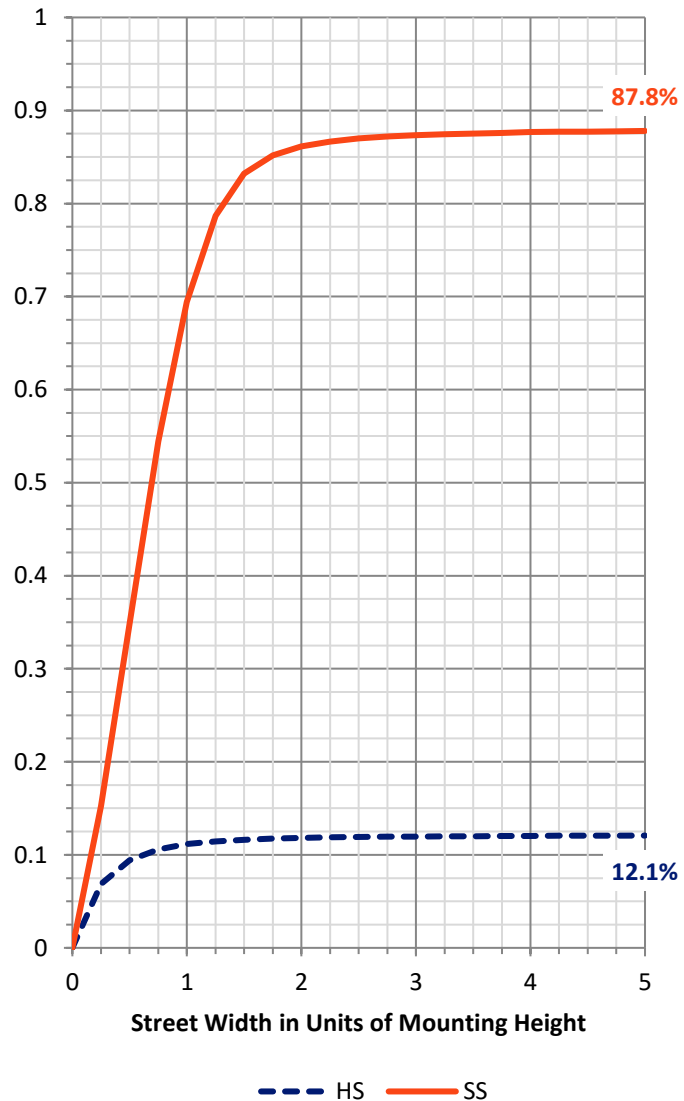
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2916.2	0.0	2916.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	21061.8	0.0	21061.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	23978.0	0.0	23978.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.6	1.3
10°-20°	1107.3	4.6
20°-30°	2275.3	9.5
30°-40°	4021.8	16.8
40°-50°	5342.6	22.3
50°-60°	5067.1	21.1
60°-70°	3865.8	16.1
70°-80°	1874.1	7.8
80°-90°	105.5	0.4
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°	23978.0	100.0
0°-180°	23978.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841874

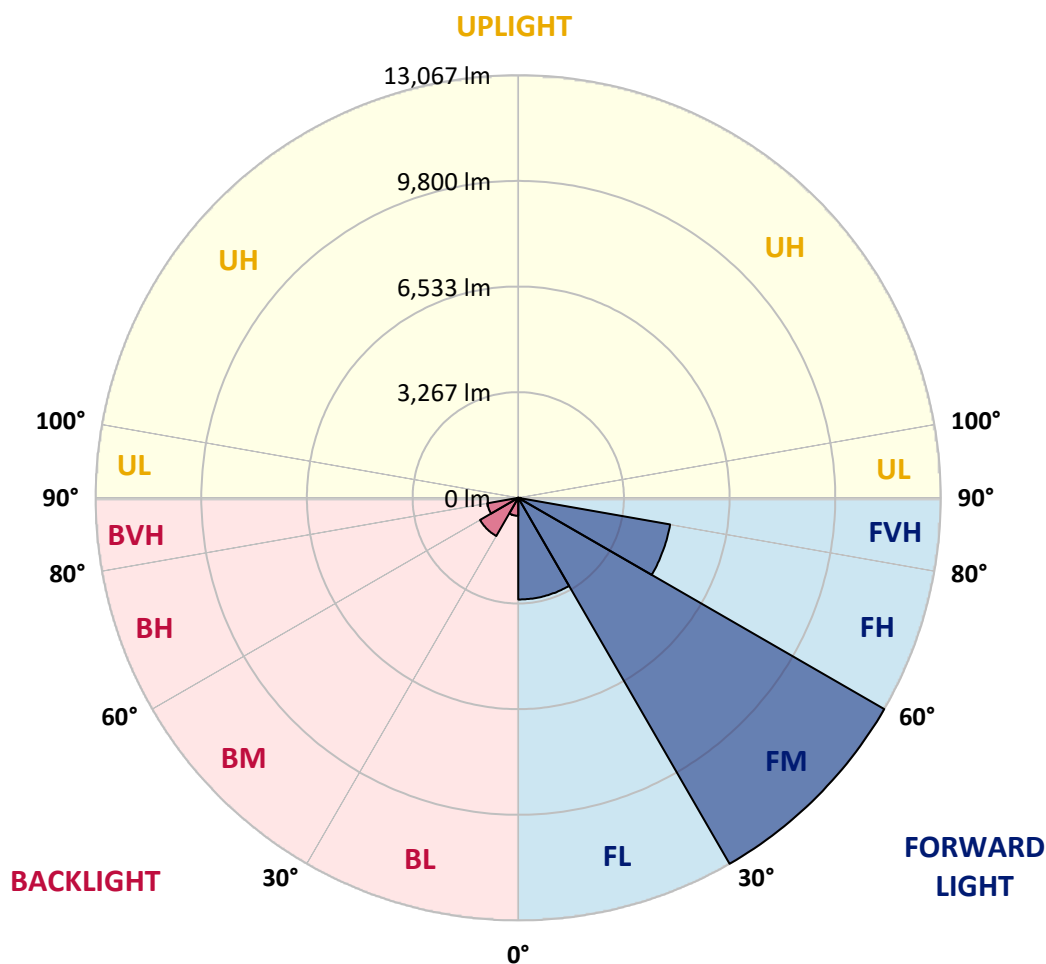
CATALOG NUMBER: ARCH4-240-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3144.7	13.1			
FM	(30°-60°)	13066.8	54.5			
FH	(60°-80°)	4766.8	19.9			G2/5000
FVH	(80°-90°)	83.5	0.3			G1/100
BL	(0°-30°)	556.5	2.3	B2/1000		
BM	(30°-60°)	1364.6	5.7	B2/2500		
BH	(60°-80°)	973.1	4.1	B2/1000		G2/1000
BVH	(80°-90°)	22.0	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-G2

Type II Short



REPORT NUMBER: P841874

CATALOG NUMBER: ARCH4-240-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6
2.5°	3927.5	3858.6	3937.4	3927.5	3858.6	3814.3	3676.5	3632.2	3469.8	3351.7	3248.3
5°	4734.7	4665.8	4734.7	4715.0	4616.6	4508.3	4281.9	4134.3	3843.9	3587.9	3356.6
7.5°	5404.1	5404.1	5433.6	5438.5	5320.4	5153.1	4872.5	4651.0	4242.5	3848.8	3479.7
10°	6127.6	6132.5	6196.5	6152.2	5994.7	5768.3	5413.9	5133.4	4641.2	4124.4	3597.8
12.5°	6900.3	6905.2	6924.9	6905.2	6718.2	6427.8	5999.6	5630.5	5064.5	4439.4	3760.2
15°	7673.0	7677.9	7702.5	7668.1	7461.4	7121.8	6634.5	6181.7	5512.4	4793.8	3957.1
17.5°	8396.5	8406.3	8426.0	8381.7	8165.2	7761.6	7264.5	6718.2	5989.8	5172.8	4178.6
20°	9046.2	9056.0	9070.8	9011.7	8795.2	8391.6	7855.1	7284.2	6477.0	5561.6	4419.7
22.5°	9700.8	9710.6	9735.2	9656.5	9415.3	8952.6	8426.0	7835.4	6993.8	5989.8	4700.3
25°	10537.4	10547.3	10567.0	10453.8	10124.0	9582.6	9026.5	8421.1	7554.9	6472.1	5044.8
27.5°	11763.0	11753.1	11753.1	11546.4	10980.4	10276.6	9631.8	9016.6	8160.2	6988.9	5423.8
30°	13278.9	13254.2	13239.5	12958.9	12151.8	11059.2	10252.0	9572.8	8741.0	7535.2	5832.3
32.5°	14637.3	14637.3	14607.7	14312.4	13456.0	12112.4	10911.5	10114.2	9302.1	8086.4	6255.5
35°	15439.5	15474.0	15459.2	15237.7	14612.7	13244.4	11802.3	10763.8	9892.7	8662.3	6762.5
37.5°	15547.8	15616.7	15631.5	15498.6	15168.8	14169.7	12791.6	11467.7	10542.4	9282.4	7254.6
40°	15109.7	15257.4	15257.4	15237.7	15119.6	14607.7	13623.4	12284.7	11211.7	9927.2	7751.7
42.5°	14435.5	14588.0	14568.4	14642.2	14612.7	14504.4	14090.9	13047.5	11881.1	10591.6	8204.5
45°	13554.5	13712.0	13672.6	13805.5	13864.5	13982.7	14041.7	13579.1	12540.6	11315.1	8711.5
47.5°	12141.9	12407.7	12466.8	12703.0	12949.1	13318.2	13598.8	13771.0	13155.8	12092.7	9262.7
50°	10055.1	10429.2	10547.3	11044.4	11718.7	12481.5	12934.3	13534.8	13588.9	12890.0	9858.2
52.5°	7200.5	7633.6	7815.7	8632.7	10020.7	11349.5	12166.5	13013.1	13756.3	13652.9	10503.0
55°	4656.0	5025.1	5202.3	5970.1	7815.7	9902.5	11260.9	12338.8	13662.8	14351.8	11241.3
57.5°	2869.4	3081.0	3199.1	3858.6	5556.6	8047.0	10074.8	11718.7	13377.3	14957.2	12009.0
60°	1934.2	2057.3	2116.3	2426.4	3775.0	6014.4	8445.7	11069.0	13003.2	15365.7	12707.9
62.5°	1284.6	1323.9	1383.0	1575.0	2490.4	4222.9	6486.9	9907.5	12722.7	15390.3	13224.7
65°	994.2	1013.9	1038.5	1122.2	1535.6	2953.0	4562.5	8027.4	12304.4	14868.6	13387.1
67.5°	782.6	802.2	831.8	876.1	1112.3	2003.1	3105.6	5881.5	11448.0	14051.6	13121.4
70°	615.2	630.0	649.7	689.0	866.2	1451.9	2052.4	3907.9	9720.4	13273.9	12284.7
72.5°	487.3	502.0	521.7	561.1	703.8	1063.1	1407.6	2436.3	7495.8	12324.0	10675.3
75°	383.9	393.7	408.5	447.9	566.0	826.9	954.8	1456.8	5094.0	10586.7	8317.7
77.5°	191.9	236.2	270.7	310.1	413.4	570.9	634.9	807.2	2150.8	5433.6	3966.9
80°	113.2	137.8	147.7	172.3	270.7	344.5	344.5	324.8	679.2	2086.8	1619.3
82.5°	64.0	88.6	93.5	98.4	162.4	196.9	157.5	118.1	137.8	698.9	472.5
85°	19.7	29.5	34.5	39.4	54.1	59.1	54.1	49.2	39.4	68.9	44.3
87.5°	0.0	0.0	0.0	0.0	4.9	9.8	9.8	9.8	14.8	14.8	14.8
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: P841874

CATALOG NUMBER: ARCH4-240-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6	3169.6
2.5°	3189.3	3125.3	3002.3	2889.1	2780.8	2702.0	2628.2	2559.3	2510.1	2470.7	2465.8
5°	3233.6	3105.6	2869.4	2647.9	2446.1	2278.8	2136.0	2022.8	1939.2	1880.1	1875.2
7.5°	3292.6	3095.8	2736.5	2406.7	2106.5	1865.3	1658.6	1506.1	1397.8	1353.5	1319.0
10°	3341.9	3085.9	2603.6	2165.6	1771.8	1466.7	1220.6	1068.0	989.3	959.7	945.0
12.5°	3425.5	3095.8	2490.4	1944.1	1481.4	1122.2	935.1	851.5	817.0	792.4	787.5
15°	3548.6	3140.1	2382.1	1727.5	1186.1	905.6	797.3	743.2	708.7	703.8	698.9
17.5°	3671.6	3179.4	2283.7	1506.1	984.3	787.5	713.7	669.4	644.7	639.8	639.8
20°	3814.3	3228.7	2175.4	1294.4	841.6	708.7	649.7	615.2	585.7	580.8	580.8
22.5°	3981.7	3297.6	2072.1	1107.4	748.1	649.7	600.5	561.1	536.5	531.5	531.5
25°	4208.1	3400.9	1988.4	969.6	684.1	600.5	556.2	521.7	502.0	492.2	492.2
27.5°	4459.1	3543.7	1929.3	885.9	639.8	561.1	516.8	487.3	467.6	457.7	457.7
30°	4739.6	3701.1	1889.9	851.5	615.2	526.6	487.3	457.7	433.1	428.2	428.2
32.5°	5049.7	3883.3	1865.3	856.4	610.3	502.0	457.7	428.2	408.5	398.7	398.7
35°	5394.2	4085.0	1850.6	885.9	620.1	482.3	433.1	403.6	383.9	374.1	374.1
37.5°	5778.1	4321.3	1850.6	915.4	644.7	477.4	408.5	379.0	364.2	354.4	354.4
40°	6137.4	4572.3	1870.3	949.9	669.4	477.4	388.8	364.2	344.5	334.7	334.7
42.5°	6418.0	4715.0	1885.0	984.3	684.1	472.5	369.1	344.5	329.8	319.9	319.9
45°	6737.9	4867.6	1855.5	999.1	684.1	462.6	354.4	329.8	315.0	305.1	305.1
47.5°	7092.2	5054.6	1850.6	1009.0	669.4	443.0	339.6	315.0	305.1	295.3	295.3
50°	7451.5	5261.3	1860.4	1004.0	649.7	413.4	319.9	305.1	290.4	280.5	280.5
52.5°	7860.0	5477.9	1880.1	994.2	605.4	379.0	305.1	290.4	275.6	265.8	260.9
55°	8312.8	5714.1	1919.5	974.5	546.3	344.5	290.4	275.6	255.9	246.1	241.2
57.5°	8834.5	6004.5	1963.8	935.1	482.3	315.0	275.6	255.9	226.4	211.6	206.7
60°	9331.6	6334.3	2013.0	841.6	418.3	285.5	260.9	231.3	201.8	191.9	187.0
62.5°	9799.2	6659.1	2037.6	674.3	354.4	260.9	246.1	211.6	182.1	172.3	167.3
65°	10099.4	7013.5	1983.5	457.7	290.4	241.2	226.4	196.9	167.3	152.6	152.6
67.5°	10119.1	7180.8	1796.4	300.2	236.2	216.6	206.7	177.2	147.7	137.8	132.9
70°	9622.0	6929.8	1373.2	236.2	196.9	187.0	187.0	157.5	128.0	118.1	113.2
72.5°	8480.2	6137.4	876.1	191.9	167.3	157.5	157.5	132.9	113.2	98.4	93.5
75°	6693.6	4734.7	467.6	157.5	137.8	132.9	123.0	108.3	93.5	83.7	78.7
77.5°	3076.1	2086.8	216.6	113.2	103.4	103.4	93.5	78.7	73.8	64.0	64.0
80°	1215.7	708.7	108.3	73.8	68.9	68.9	68.9	54.1	54.1	44.3	39.4
82.5°	334.7	147.7	54.1	44.3	44.3	44.3	39.4	34.5	34.5	29.5	29.5
85°	34.5	24.6	24.6	24.6	24.6	19.7	19.7	14.8	9.8	9.8	9.8
87.5°	14.8	14.8	14.8	14.8	14.8	9.8	4.9	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)