

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: P841298

Luminaire Tested: **ARCH4-160-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841298
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: ARCH4-160-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1305mA 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: 17458 lumens
Efficiency: N/A
Efficacy: 108.6 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

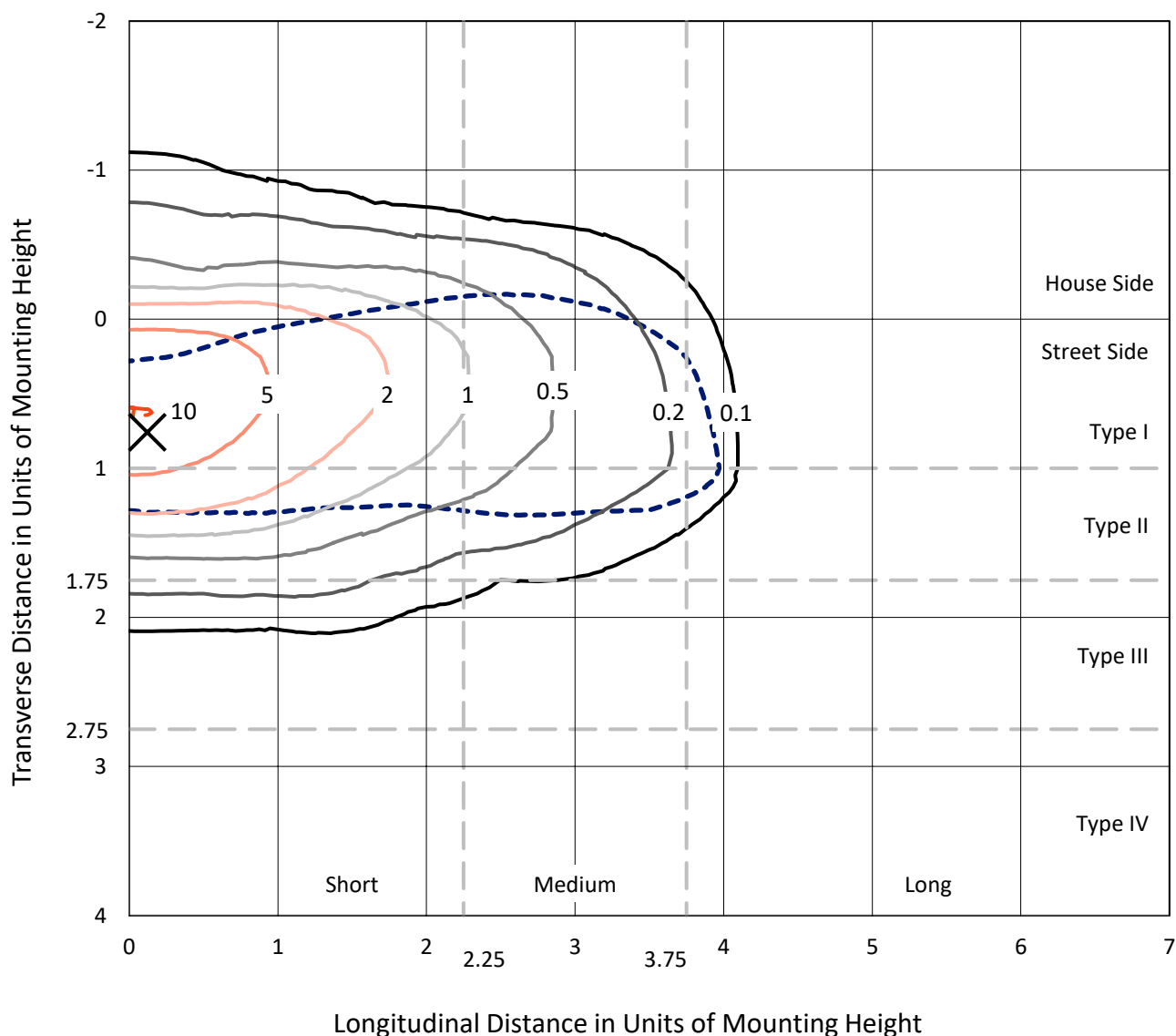
Input Watts (W): 160.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841298
 CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

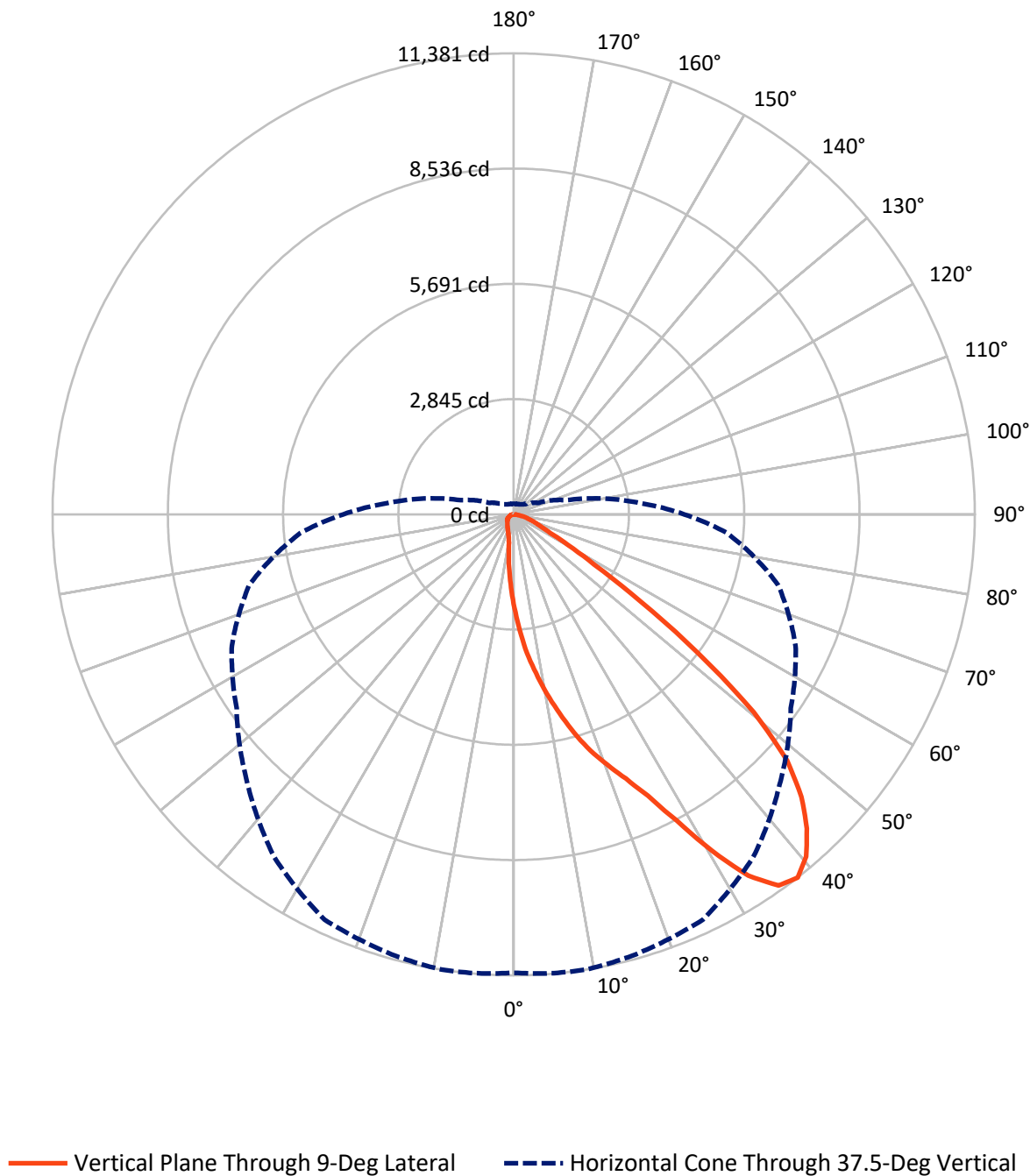
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
 Type II - Short - N/A

REPORT NUMBER: P841298
CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841298

CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

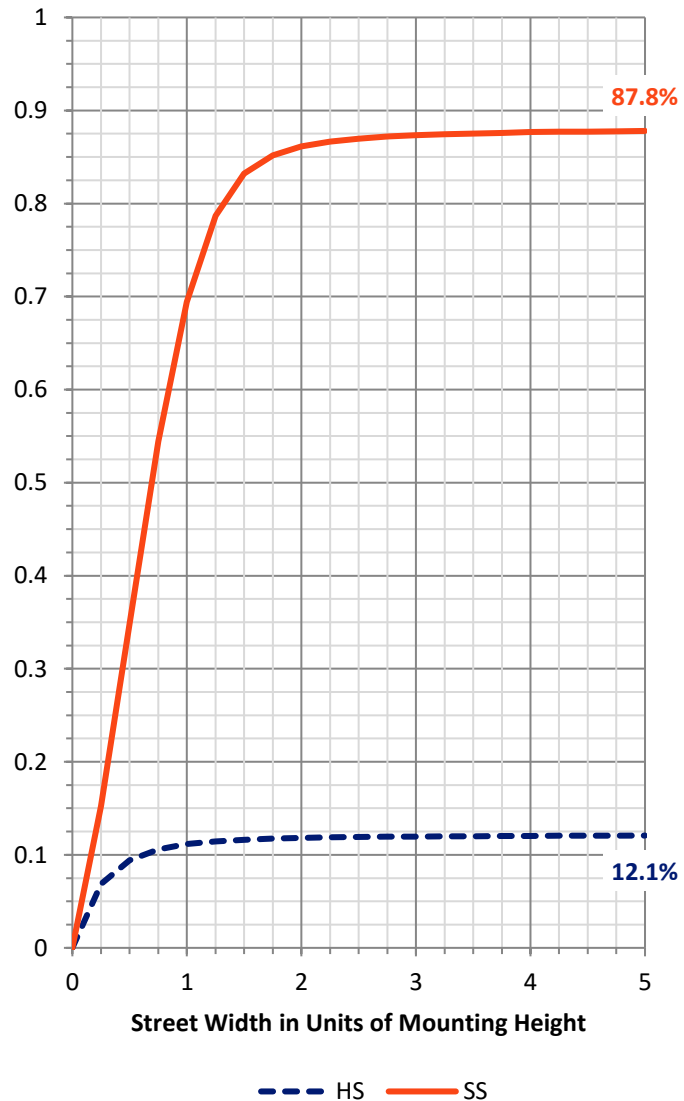
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2123.2	0.0	2123.2
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	15334.8	0.0	15334.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	17458.0	0.0	17458.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.0	1.3
10°-20°	806.2	4.6
20°-30°	1656.6	9.5
30°-40°	2928.2	16.8
40°-50°	3889.8	22.3
50°-60°	3689.3	21.1
60°-70°	2814.6	16.1
70°-80°	1364.5	7.8
80°-90°	76.8	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°	17458.0	100.0
0°-180°	17458.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841298

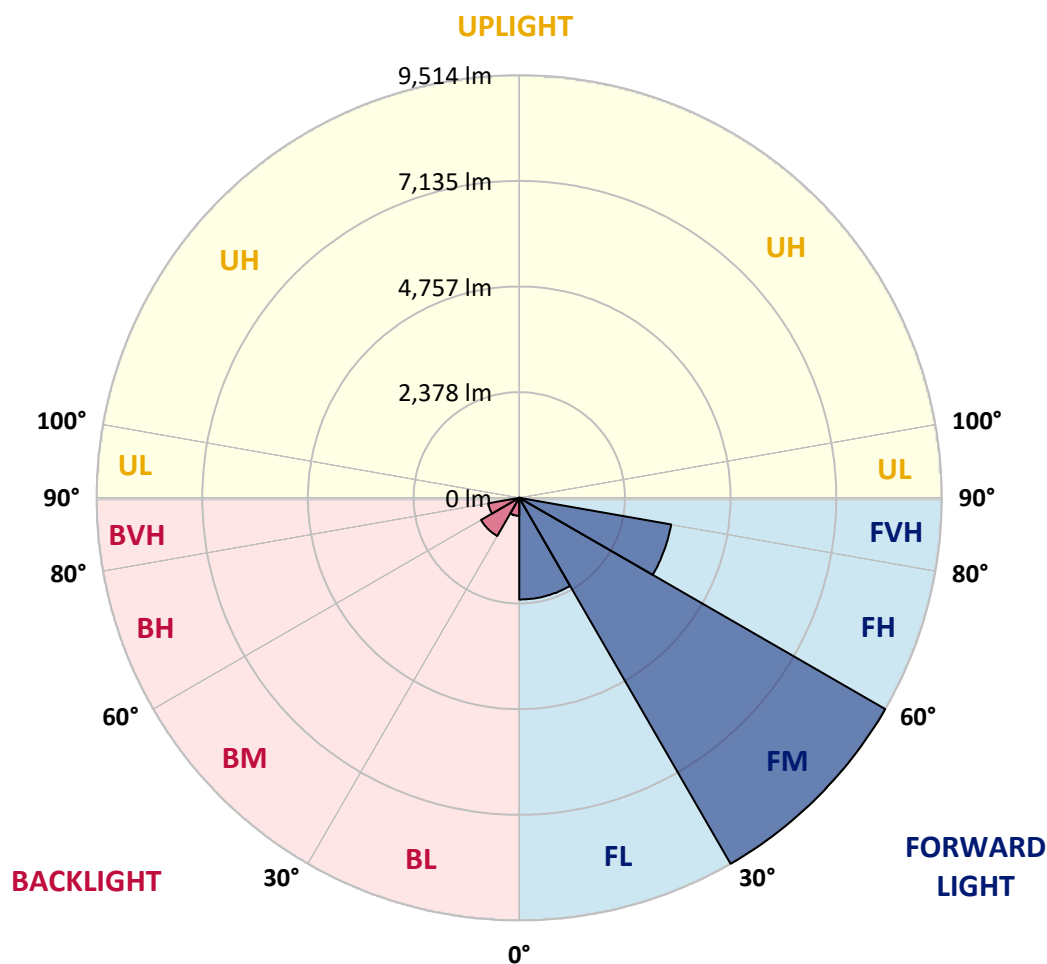
CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2289.6	13.1			
FM	(30°-60°)	9513.8	54.5			
FH	(60°-80°)	3470.6	19.9			G2/5000
FVH	(80°-90°)	60.8	0.3			G1/100
BL	(0°-30°)	405.2	2.3	B1/500		
BM	(30°-60°)	993.5	5.7	B1/1000		
BH	(60°-80°)	708.5	4.1	B2/1000		G2/1000
BVH	(80°-90°)	16.0	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: P841298

CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7
2.5°	2859.6	2809.4	2866.8	2859.6	2809.4	2777.2	2676.8	2644.6	2526.3	2440.3	2365.1
5°	3447.3	3397.1	3447.3	3432.9	3361.3	3282.4	3117.6	3010.1	2798.7	2612.3	2443.9
7.5°	3934.6	3934.6	3956.1	3959.7	3873.7	3751.9	3547.6	3386.4	3088.9	2802.3	2533.5
10°	4461.4	4465.0	4511.6	4479.3	4364.6	4199.8	3941.8	3737.5	3379.2	3002.9	2619.5
12.5°	5024.0	5027.6	5041.9	5027.6	4891.4	4680.0	4368.2	4099.5	3687.4	3232.3	2737.7
15°	5586.6	5590.2	5608.1	5583.0	5432.5	5185.2	4830.5	4500.8	4013.5	3490.3	2881.1
17.5°	6113.4	6120.5	6134.9	6102.6	5944.9	5651.1	5289.2	4891.4	4361.0	3766.2	3042.3
20°	6586.4	6593.5	6604.3	6561.3	6403.6	6109.8	5719.2	5303.5	4715.8	4049.3	3217.9
22.5°	7063.0	7070.1	7088.0	7030.7	6855.1	6518.3	6134.9	5704.8	5092.1	4361.0	3422.2
25°	7672.1	7679.3	7693.6	7611.2	7371.1	6977.0	6572.0	6131.3	5500.6	4712.2	3673.0
27.5°	8564.4	8557.3	8557.3	8406.8	7994.7	7482.2	7012.8	6564.9	5941.3	5088.5	3949.0
30°	9668.1	9650.2	9639.5	9435.2	8847.5	8052.0	7464.3	6969.8	6364.2	5486.2	4246.4
32.5°	10657.2	10657.2	10635.7	10420.6	9797.1	8818.8	7944.5	7364.0	6772.7	5887.6	4554.6
35°	11241.3	11266.3	11255.6	11094.3	10639.2	9643.0	8593.1	7837.0	7202.7	6306.9	4923.6
37.5°	11320.1	11370.3	11381.0	11284.3	11044.2	10316.7	9313.4	8349.4	7675.7	6758.4	5282.0
40°	11001.2	11108.7	11108.7	11094.3	11008.3	10635.7	9919.0	8944.3	8163.1	7227.8	5643.9
42.5°	10510.2	10621.3	10607.0	10660.7	10639.2	10560.4	10259.4	9499.7	8650.4	7711.6	5973.6
45°	9868.8	9983.5	9954.8	10051.6	10094.6	10180.6	10223.6	9886.7	9130.6	8238.3	6342.7
47.5°	8840.4	9033.9	9076.9	9248.9	9428.0	9696.8	9901.0	10026.5	9578.5	8804.5	6744.0
50°	7321.0	7593.3	7679.3	8041.2	8532.2	9087.6	9417.3	9854.5	9893.9	9385.0	7177.6
52.5°	5242.6	5557.9	5690.5	6285.4	7295.9	8263.4	8858.3	9474.6	10015.7	9940.5	7647.1
55°	3389.9	3658.7	3787.7	4346.7	5690.5	7209.9	8198.9	8983.7	9947.6	10449.3	8184.6
57.5°	2089.1	2243.2	2329.2	2809.4	4045.7	5858.9	7335.3	8532.2	9739.8	10890.1	8743.6
60°	1408.3	1497.9	1540.9	1766.6	2748.5	4379.0	6149.2	8059.2	9467.5	11187.5	9252.4
62.5°	935.3	963.9	1006.9	1146.7	1813.2	3074.6	4723.0	7213.5	9263.2	11205.4	9628.7
65°	723.9	738.2	756.1	817.0	1118.0	2150.1	3321.9	5844.6	8958.6	10825.6	9747.0
67.5°	569.8	584.1	605.6	637.9	809.9	1458.5	2261.2	4282.2	8335.1	10230.7	9553.5
70°	447.9	458.7	473.0	501.7	630.7	1057.1	1494.3	2845.3	7077.3	9664.5	8944.3
72.5°	354.8	365.5	379.8	408.5	512.4	774.0	1024.9	1773.8	5457.6	8972.9	7772.5
75°	279.5	286.7	297.4	326.1	412.1	602.0	695.2	1060.7	3708.9	7708.0	6056.0
77.5°	139.8	172.0	197.1	225.8	301.0	415.7	462.3	587.7	1566.0	3956.1	2888.3
80°	82.4	100.3	107.5	125.4	197.1	250.8	250.8	236.5	494.5	1519.4	1179.0
82.5°	46.6	64.5	68.1	71.7	118.3	143.3	114.7	86.0	100.3	508.8	344.0
85°	14.3	21.5	25.1	28.7	39.4	43.0	39.4	35.8	28.7	50.2	32.3
87.5°	0.0	0.0	0.0	0.0	3.6	7.2	7.2	7.2	10.8	10.8	10.8
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: P841298

CATALOG NUMBER: ARCH4-160-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7	2307.7
2.5°	2322.1	2275.5	2185.9	2103.5	2024.6	1967.3	1913.6	1863.4	1827.6	1798.9	1795.3
5°	2354.3	2261.2	2089.1	1927.9	1781.0	1659.1	1555.2	1472.8	1411.9	1368.9	1365.3
7.5°	2397.3	2254.0	1992.4	1752.3	1533.7	1358.1	1207.6	1096.5	1017.7	985.4	960.4
10°	2433.2	2246.8	1895.6	1576.7	1290.0	1067.9	888.7	777.6	720.3	698.8	688.0
12.5°	2494.1	2254.0	1813.2	1415.5	1078.6	817.0	680.9	619.9	594.9	576.9	573.4
15°	2583.7	2286.2	1734.4	1257.8	863.6	659.4	580.5	541.1	516.0	512.4	508.8
17.5°	2673.2	2314.9	1662.7	1096.5	716.7	573.4	519.6	487.3	469.4	465.8	465.8
20°	2777.2	2350.7	1583.9	942.4	612.8	516.0	473.0	447.9	426.4	422.8	422.8
22.5°	2899.0	2400.9	1508.6	806.3	544.7	473.0	437.2	408.5	390.6	387.0	387.0
25°	3063.8	2476.2	1447.7	705.9	498.1	437.2	404.9	379.8	365.5	358.3	358.3
27.5°	3246.6	2580.1	1404.7	645.0	465.8	408.5	376.3	354.8	340.4	333.3	333.3
30°	3450.9	2694.7	1376.0	619.9	447.9	383.4	354.8	333.3	315.3	311.8	311.8
32.5°	3676.6	2827.3	1358.1	623.5	444.3	365.5	333.3	311.8	297.4	290.3	290.3
35°	3927.5	2974.3	1347.4	645.0	451.5	351.2	315.3	293.8	279.5	272.3	272.3
37.5°	4207.0	3146.3	1347.4	666.5	469.4	347.6	297.4	275.9	265.2	258.0	258.0
40°	4468.6	3329.0	1361.7	691.6	487.3	347.6	283.1	265.2	250.8	243.7	243.7
42.5°	4672.8	3432.9	1372.5	716.7	498.1	344.0	268.8	250.8	240.1	232.9	232.9
45°	4905.7	3544.0	1351.0	727.4	498.1	336.8	258.0	240.1	229.3	222.2	222.2
47.5°	5163.7	3680.2	1347.4	734.6	487.3	322.5	247.3	229.3	222.2	215.0	215.0
50°	5425.3	3830.7	1354.5	731.0	473.0	301.0	232.9	222.2	211.4	204.3	204.3
52.5°	5722.8	3988.4	1368.9	723.9	440.8	275.9	222.2	211.4	200.7	193.5	189.9
55°	6052.4	4160.4	1397.5	709.5	397.8	250.8	211.4	200.7	186.3	179.2	175.6
57.5°	6432.3	4371.8	1429.8	680.9	351.2	229.3	200.7	186.3	164.8	154.1	150.5
60°	6794.2	4611.9	1465.6	612.8	304.6	207.8	189.9	168.4	146.9	139.8	136.2
62.5°	7134.6	4848.4	1483.5	490.9	258.0	189.9	179.2	154.1	132.6	125.4	121.8
65°	7353.2	5106.4	1444.1	333.3	211.4	175.6	164.8	143.3	121.8	111.1	111.1
67.5°	7367.6	5228.2	1308.0	218.6	172.0	157.7	150.5	129.0	107.5	100.3	96.8
70°	7005.6	5045.5	999.8	172.0	143.3	136.2	136.2	114.7	93.2	86.0	82.4
72.5°	6174.3	4468.6	637.9	139.8	121.8	114.7	114.7	96.8	82.4	71.7	68.1
75°	4873.5	3447.3	340.4	114.7	100.3	96.8	89.6	78.8	68.1	60.9	57.3
77.5°	2239.7	1519.4	157.7	82.4	75.3	75.3	68.1	57.3	53.8	46.6	46.6
80°	885.1	516.0	78.8	53.8	50.2	50.2	50.2	39.4	39.4	32.3	28.7
82.5°	243.7	107.5	39.4	32.3	32.3	32.3	28.7	25.1	25.1	21.5	21.5
85°	25.1	17.9	17.9	17.9	17.9	14.3	14.3	10.8	7.2	7.2	7.2
87.5°	10.8	10.8	10.8	10.8	10.8	7.2	3.6	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)