

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: P836564

Luminaire Tested: **ARCH3-40-740-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-40-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 345mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5201 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 43.6
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

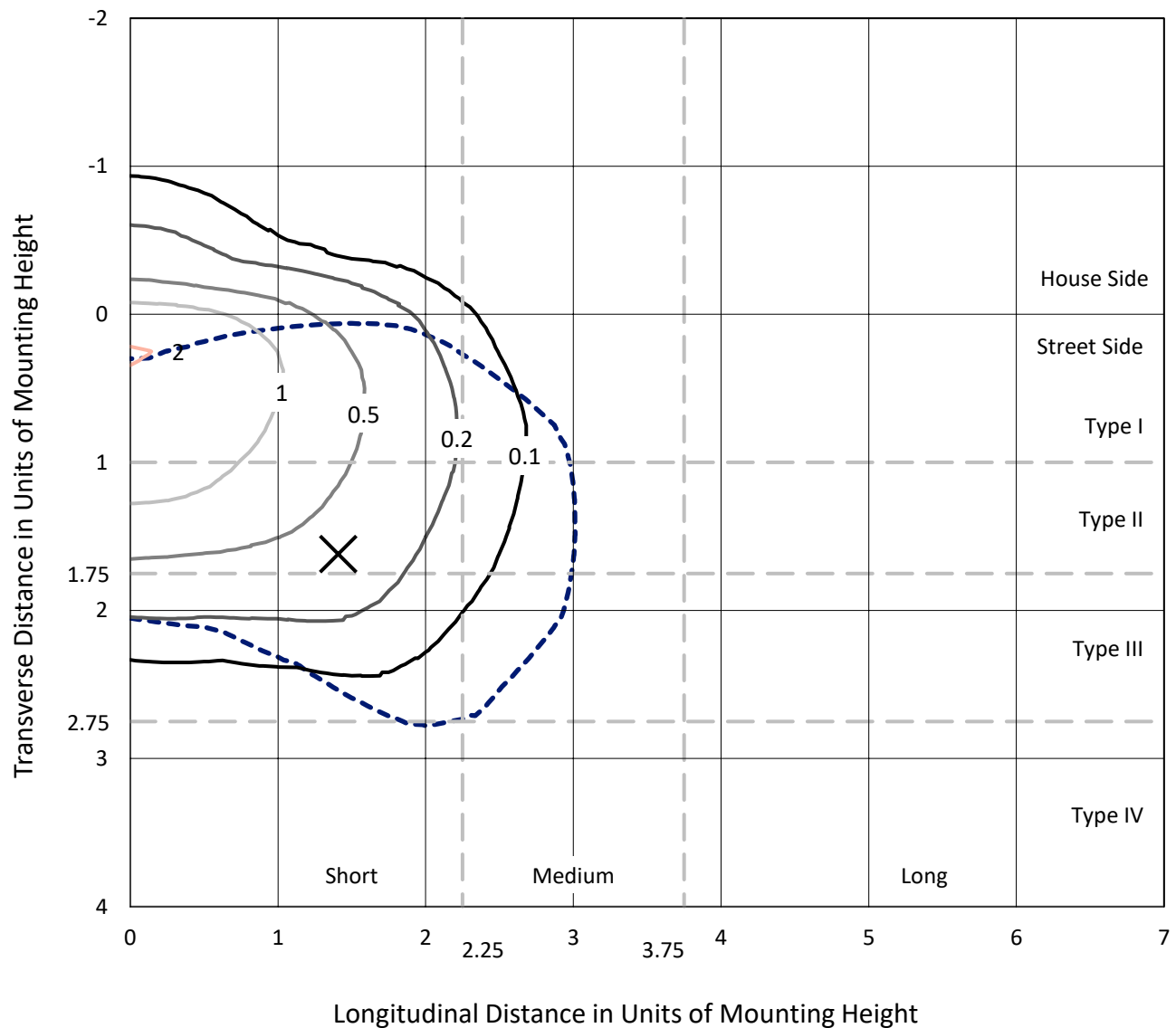


REPORT NUMBER: P836564

CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

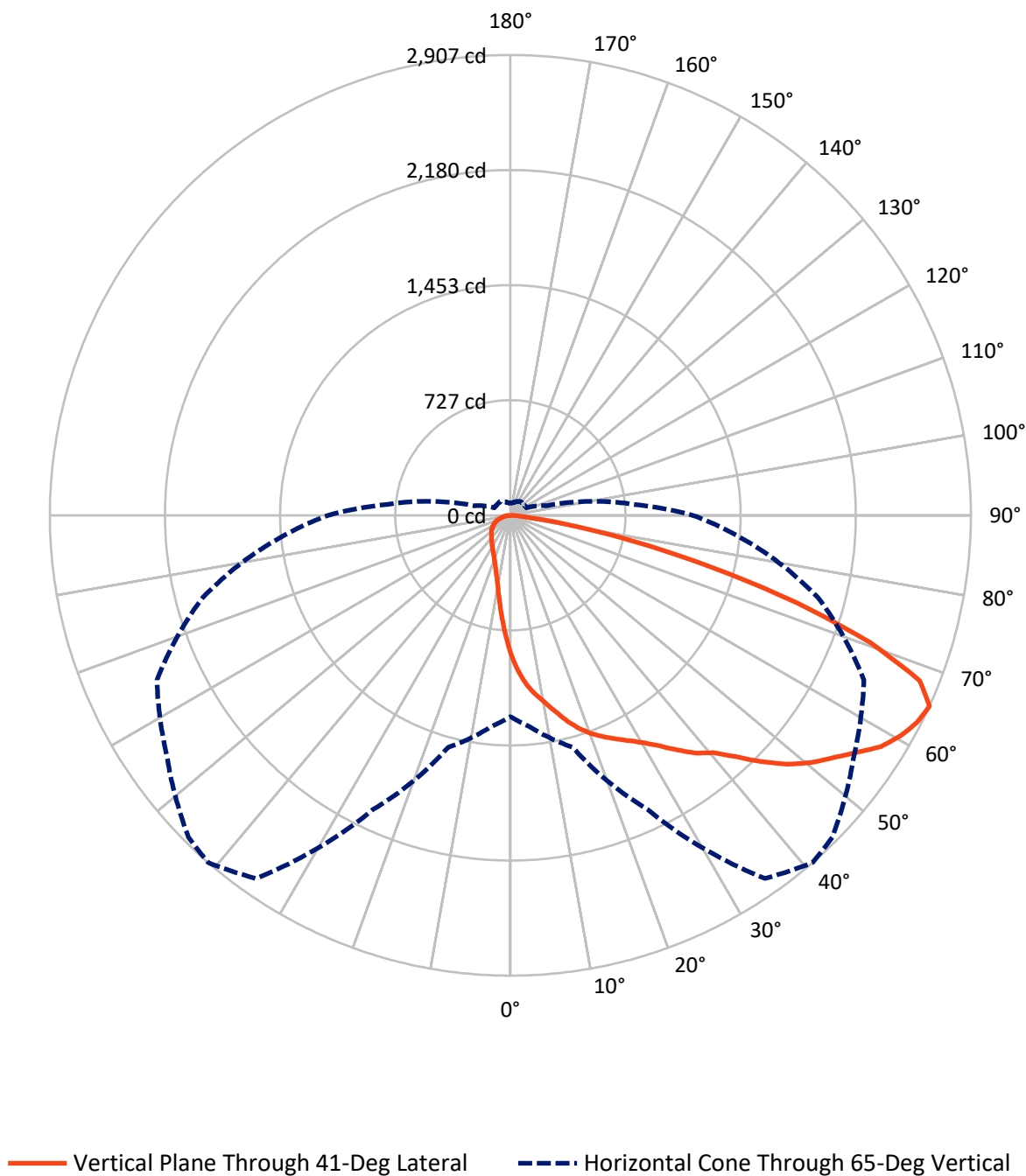
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type III - Short - N/A

REPORT NUMBER: P836564
CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836564

CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

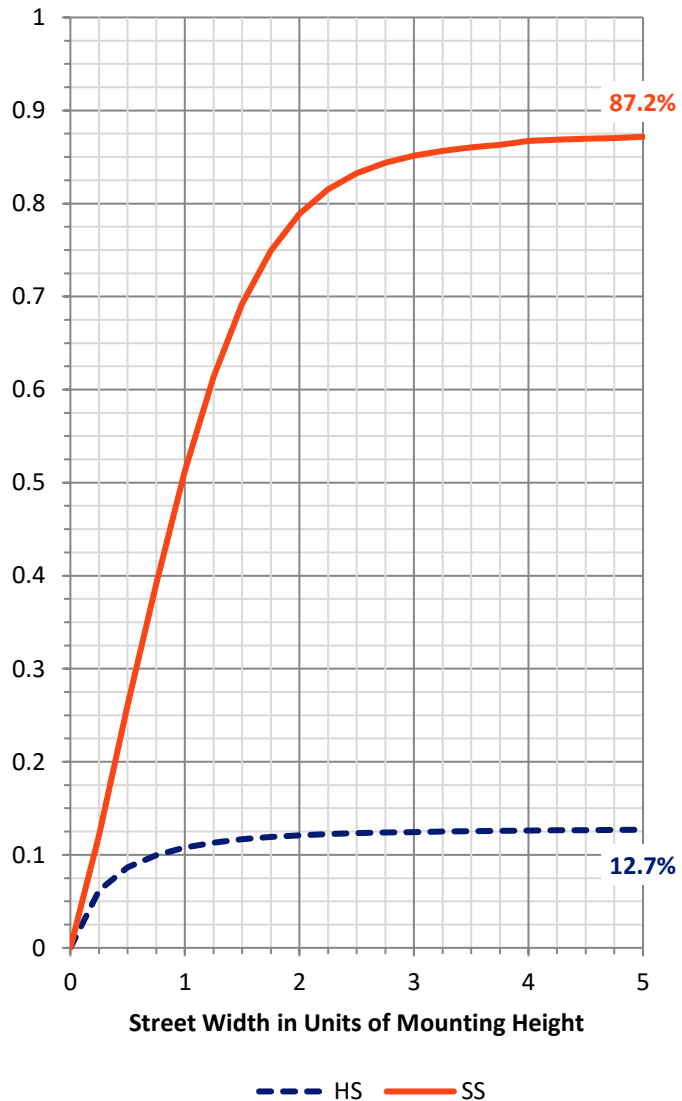
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	667.7	0.0	667.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4533.3	0.0	4533.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	5201.0	0.0	5201.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	1.6
10°-20°	247.6	4.8
20°-30°	426.0	8.2
30°-40°	646.0	12.4
40°-50°	946.5	18.2
50°-60°	1195.2	23.0
60°-70°	1120.7	21.5
70°-80°	499.5	9.6
80°-90°	37.0	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°	5201.0	100.0
0°-180°	5201.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836564

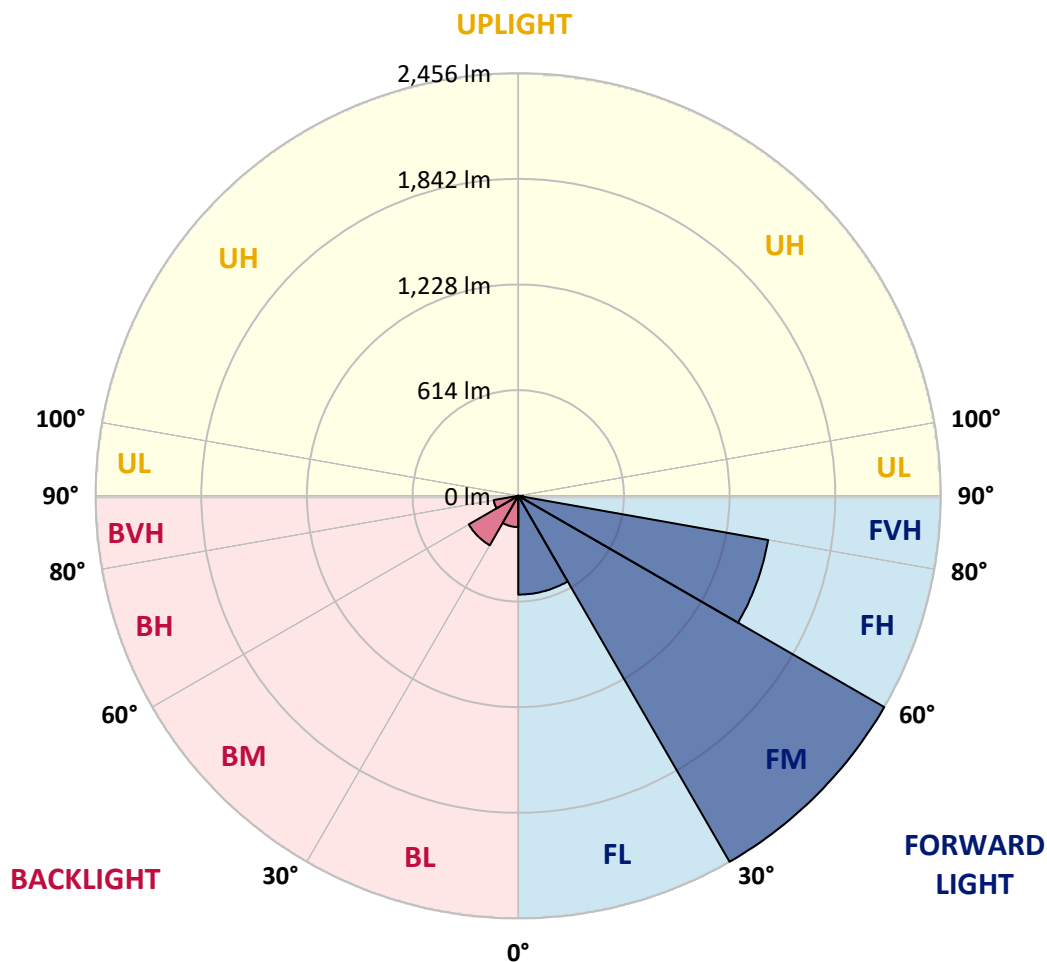
CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	574.4	11.0			
FM	(30°-60°)	2456.1	47.2			
FH	(60°-80°)	1475.1	28.4			G1/1800
FVH	(80°-90°)	27.6	0.5			G1/100
BL	(0°-30°)	181.7	3.5	B1/500		
BM	(30°-60°)	331.6	6.4	B1/1000		
BH	(60°-80°)	145.1	2.8	B1/500		G1/500
BVH	(80°-90°)	9.4	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



REPORT NUMBER: P836564

CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2
2.5°	1022.2	1018.9	1016.7	1004.7	1004.7	988.2	989.3	974.0	955.3	925.7	893.9
5°	1118.7	1114.4	1108.9	1096.8	1092.4	1076.0	1073.8	1051.8	1020.0	968.5	911.4
7.5°	1203.2	1198.8	1191.1	1173.6	1161.5	1141.8	1136.3	1107.8	1072.7	1009.1	929.0
10°	1280.0	1276.7	1266.8	1244.9	1228.4	1204.3	1194.4	1156.0	1112.2	1042.0	943.3
12.5°	1357.9	1353.5	1340.3	1321.7	1301.9	1273.4	1261.3	1212.0	1156.0	1078.2	964.1
15°	1430.2	1423.7	1413.8	1394.0	1376.5	1349.1	1335.9	1277.8	1209.8	1118.7	991.5
17.5°	1477.4	1471.9	1463.1	1452.2	1437.9	1417.1	1403.9	1346.9	1263.5	1158.2	1020.0
20°	1505.9	1503.7	1500.4	1493.9	1487.3	1473.0	1463.1	1409.4	1321.7	1196.6	1047.5
22.5°	1527.9	1525.7	1524.6	1524.6	1525.7	1520.2	1513.6	1467.5	1377.6	1237.2	1072.7
25°	1561.9	1560.8	1558.6	1556.4	1564.1	1565.1	1563.0	1531.1	1447.8	1290.9	1104.5
27.5°	1609.0	1605.7	1601.3	1599.2	1606.8	1612.3	1616.7	1594.8	1522.4	1345.8	1140.7
30°	1681.4	1671.5	1660.6	1652.9	1658.4	1667.2	1677.0	1663.9	1599.2	1413.8	1178.0
32.5°	1767.0	1754.9	1729.7	1715.4	1729.7	1736.3	1743.9	1737.3	1679.2	1487.3	1215.3
35°	1871.2	1856.9	1830.6	1809.7	1835.0	1820.7	1817.4	1810.8	1754.9	1559.7	1256.9
37.5°	2044.5	2023.6	1981.9	1935.9	1935.9	1905.2	1893.1	1873.4	1822.9	1624.4	1297.5
40°	2245.2	2217.8	2164.0	2096.0	2033.5	1969.9	1962.2	1947.9	1903.0	1699.0	1343.6
42.5°	2465.6	2413.0	2338.4	2256.1	2155.2	2082.8	2065.3	2024.7	1980.8	1774.6	1389.7
45°	2710.2	2600.5	2492.0	2450.3	2283.6	2217.8	2184.8	2111.4	2062.0	1853.6	1437.9
47.5°	2749.7	2664.2	2591.8	2585.2	2403.1	2348.3	2311.0	2205.7	2149.7	1938.1	1488.4
50°	2727.8	2676.2	2683.9	2657.6	2490.9	2454.7	2426.1	2306.6	2236.4	2019.2	1534.4
52.5°	2635.6	2664.2	2708.0	2659.8	2574.2	2544.6	2530.3	2415.2	2317.6	2093.8	1576.1
55°	2526.0	2545.7	2640.0	2699.3	2670.7	2644.4	2631.2	2541.3	2397.6	2156.3	1614.5
57.5°	2365.8	2357.0	2461.2	2692.7	2771.6	2756.3	2742.0	2665.3	2472.2	2201.3	1638.6
60°	2125.6	2107.0	2238.6	2561.1	2804.5	2828.7	2822.1	2747.5	2529.2	2200.2	1628.8
62.5°	1709.9	1756.0	1938.1	2346.1	2818.8	2880.2	2868.2	2754.1	2547.9	2136.6	1566.2
65°	1271.2	1337.0	1515.8	2049.9	2799.1	2906.5	2873.6	2646.6	2461.2	2010.5	1429.1
67.5°	915.8	974.0	1104.5	1686.9	2609.3	2785.9	2747.5	2471.1	2261.6	1831.7	1239.4
70°	626.3	668.0	756.8	1228.4	2227.6	2408.6	2384.5	2209.0	1946.8	1618.9	1006.9
72.5°	442.0	459.6	516.6	810.5	1692.4	1889.8	1861.3	1817.4	1564.1	1345.8	783.1
75°	331.2	342.2	372.9	524.3	1141.8	1309.6	1283.3	1308.5	1168.1	1018.9	570.3
77.5°	125.0	136.0	211.7	334.5	675.6	804.0	777.6	793.0	649.3	514.4	284.1
80°	34.0	36.2	70.2	159.0	307.1	400.3	364.1	312.6	241.3	236.9	150.3
82.5°	14.3	16.5	31.8	85.6	109.7	109.7	92.1	114.1	92.1	110.8	72.4
85°	5.5	6.6	7.7	21.9	14.3	15.4	16.5	21.9	18.6	23.0	16.5
87.5°	0.0	0.0	0.0	1.1	1.1	2.2	1.1	2.2	3.3	3.3	3.3
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: P836564

CATALOG NUMBER: ARCH3-40-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2
2.5°	880.7	868.7	851.1	822.6	793.0	776.5	755.7	752.4	730.5	728.3	719.5
5°	886.2	861.0	816.0	761.2	707.4	665.8	635.1	618.6	586.8	586.8	578.0
7.5°	890.6	851.1	778.7	697.6	624.1	568.1	526.5	508.9	480.4	478.2	471.6
10°	891.7	839.1	738.2	632.9	542.9	485.9	445.3	425.6	400.3	398.1	393.8
12.5°	900.5	832.5	702.0	576.9	484.8	423.4	383.9	367.4	347.7	345.5	341.1
15°	914.7	832.5	671.2	529.8	433.2	376.2	342.2	326.8	312.6	310.4	308.2
17.5°	929.0	830.3	640.5	485.9	390.5	338.9	309.3	297.2	286.3	285.2	283.0
20°	942.2	829.2	609.8	448.6	357.6	308.2	285.2	274.2	265.4	265.4	264.3
22.5°	955.3	827.0	580.2	413.5	329.0	285.2	265.4	253.4	246.8	246.8	245.7
25°	975.1	827.0	552.8	383.9	306.0	267.6	247.9	239.1	233.6	232.5	232.5
27.5°	998.1	833.6	528.7	357.6	286.3	250.1	234.7	225.9	219.4	217.2	218.3
30°	1023.3	839.1	506.7	334.5	267.6	236.9	220.5	211.7	205.1	202.9	204.0
32.5°	1048.6	845.6	487.0	313.7	249.0	224.8	208.4	198.5	191.9	190.8	190.8
35°	1076.0	852.2	467.2	296.1	233.6	212.8	197.4	186.5	182.1	179.9	181.0
37.5°	1103.4	863.2	448.6	279.7	222.7	201.8	187.6	176.6	173.3	172.2	172.2
40°	1136.3	879.6	440.9	268.7	212.8	191.9	179.9	168.9	165.6	165.6	165.6
42.5°	1163.7	892.8	434.3	256.7	205.1	183.2	172.2	163.4	161.2	160.1	161.2
45°	1191.1	904.9	425.6	245.7	195.2	174.4	165.6	156.8	154.7	154.7	154.7
47.5°	1218.6	911.4	413.5	234.7	186.5	166.7	159.0	151.4	149.2	149.2	149.2
50°	1240.5	916.9	395.9	222.7	176.6	160.1	152.5	144.8	142.6	142.6	142.6
52.5°	1262.4	918.0	377.3	208.4	166.7	152.5	145.9	138.2	136.0	134.9	134.9
55°	1282.2	916.9	355.4	191.9	155.7	143.7	138.2	131.6	127.2	122.8	125.0
57.5°	1296.4	915.8	330.1	175.5	144.8	134.9	132.7	123.9	115.2	104.2	106.4
60°	1290.9	903.8	302.7	154.7	132.7	126.1	126.1	114.1	98.7	93.2	94.3
62.5°	1255.8	869.8	274.2	132.7	120.6	117.4	116.3	103.1	91.0	85.6	86.6
65°	1150.6	784.2	232.5	113.0	108.6	107.5	107.5	95.4	84.5	77.9	79.0
67.5°	990.4	658.1	189.7	95.4	96.5	98.7	98.7	87.7	76.8	70.2	71.3
70°	794.1	514.4	151.4	82.3	83.4	86.6	88.8	79.0	69.1	62.5	62.5
72.5°	597.8	390.5	121.7	69.1	74.6	74.6	77.9	70.2	60.3	53.7	54.8
75°	433.2	279.7	96.5	58.1	64.7	63.6	63.6	59.2	51.6	47.2	47.2
77.5°	205.1	147.0	76.8	41.7	50.5	49.4	50.5	47.2	43.9	39.5	40.6
80°	100.9	72.4	49.4	29.6	35.1	36.2	39.5	37.3	36.2	32.9	32.9
82.5°	48.3	28.5	23.0	20.8	24.1	25.2	27.4	27.4	28.5	26.3	26.3
85°	13.2	7.7	9.9	13.2	15.4	16.5	18.6	19.7	19.7	18.6	19.7
87.5°	3.3	3.3	4.4	6.6	7.7	8.8	9.9	9.9	4.4	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)