

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: P842121

Luminaire Tested: **ARCH4-270-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842121
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: ARCH4-270-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 27353 lumens
Efficiency: N/A
Efficacy: 101.7 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

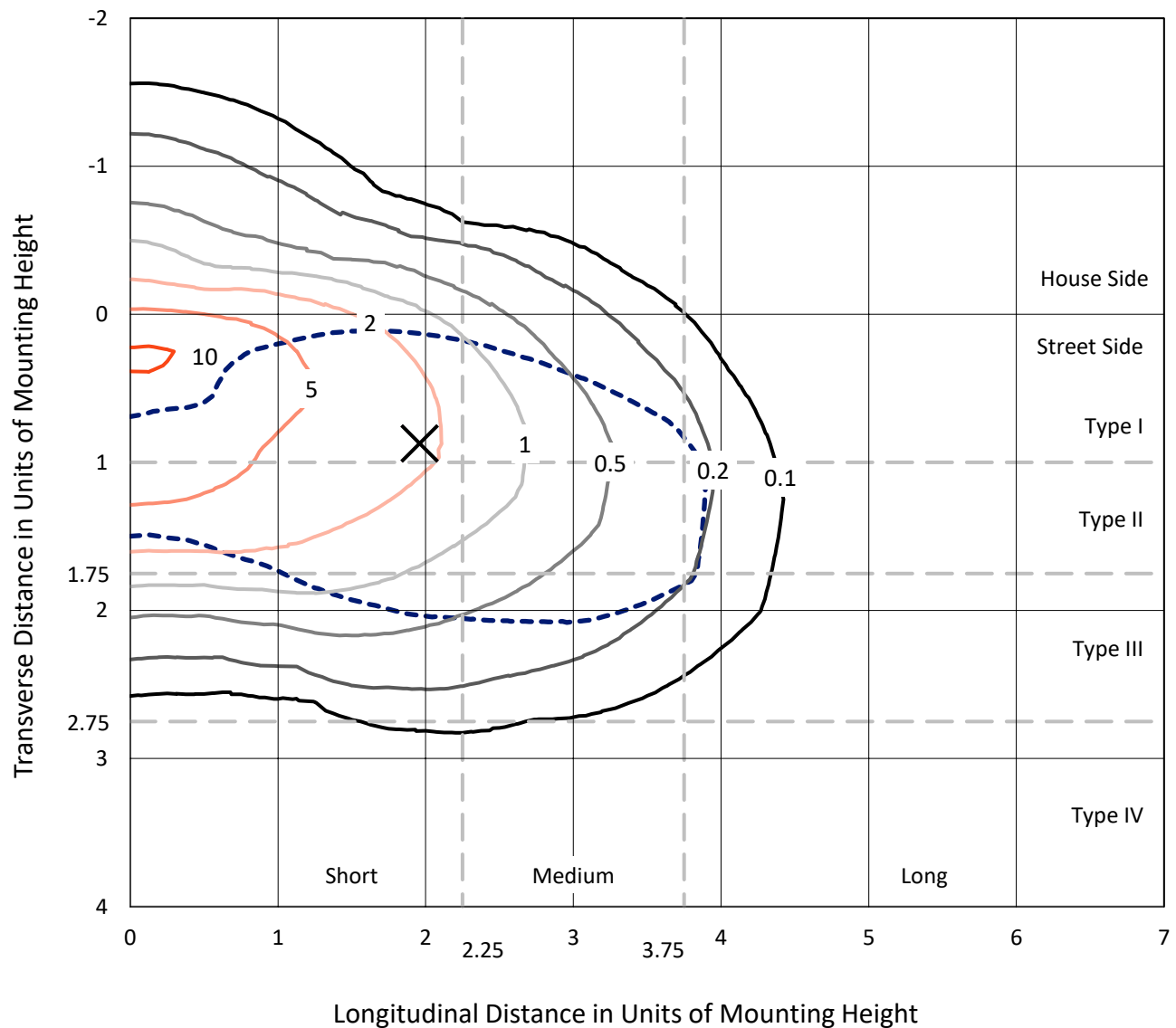


REPORT NUMBER: P842121

CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

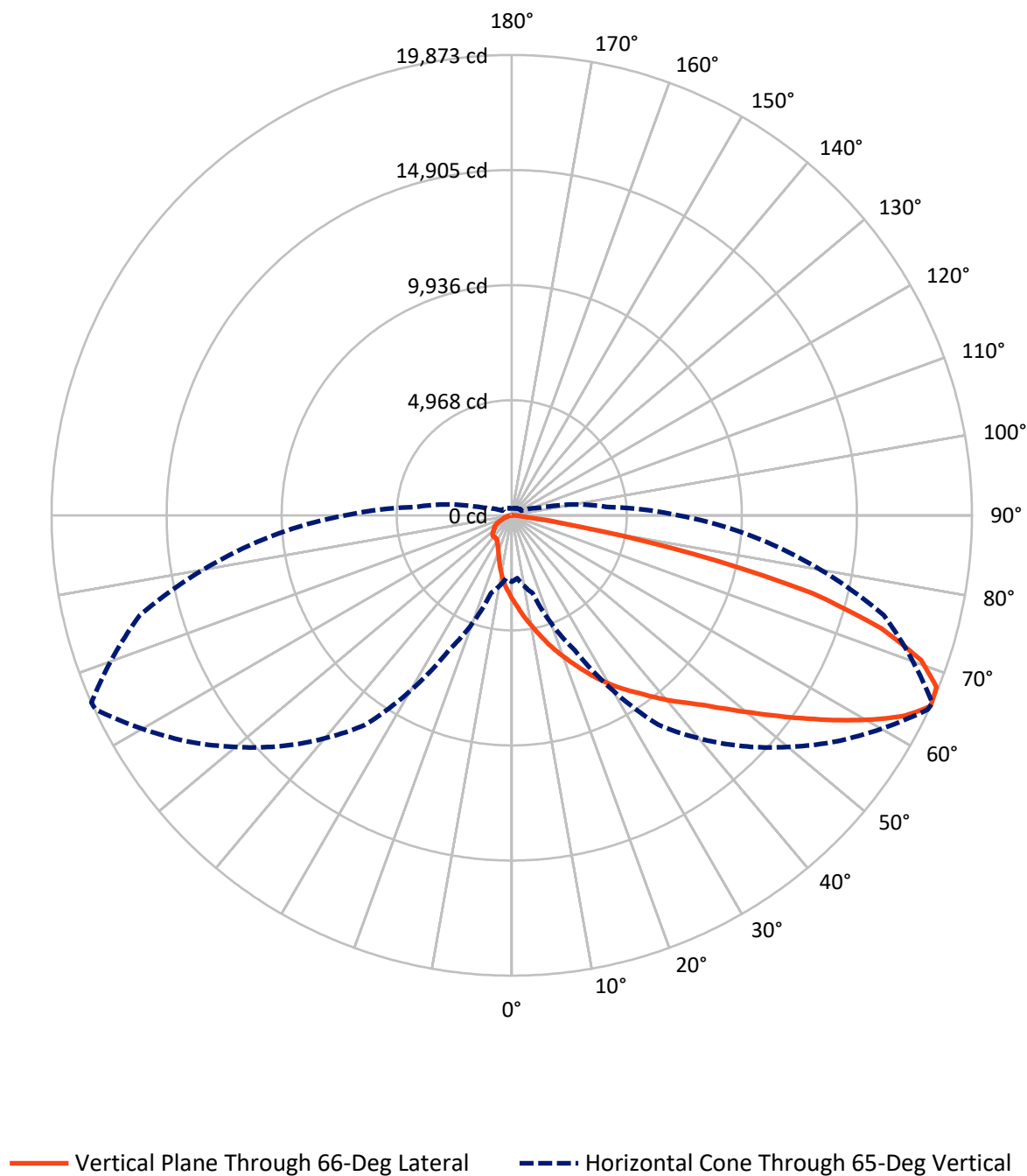
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type III - Short - N/A

REPORT NUMBER: P842121
CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842121

CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

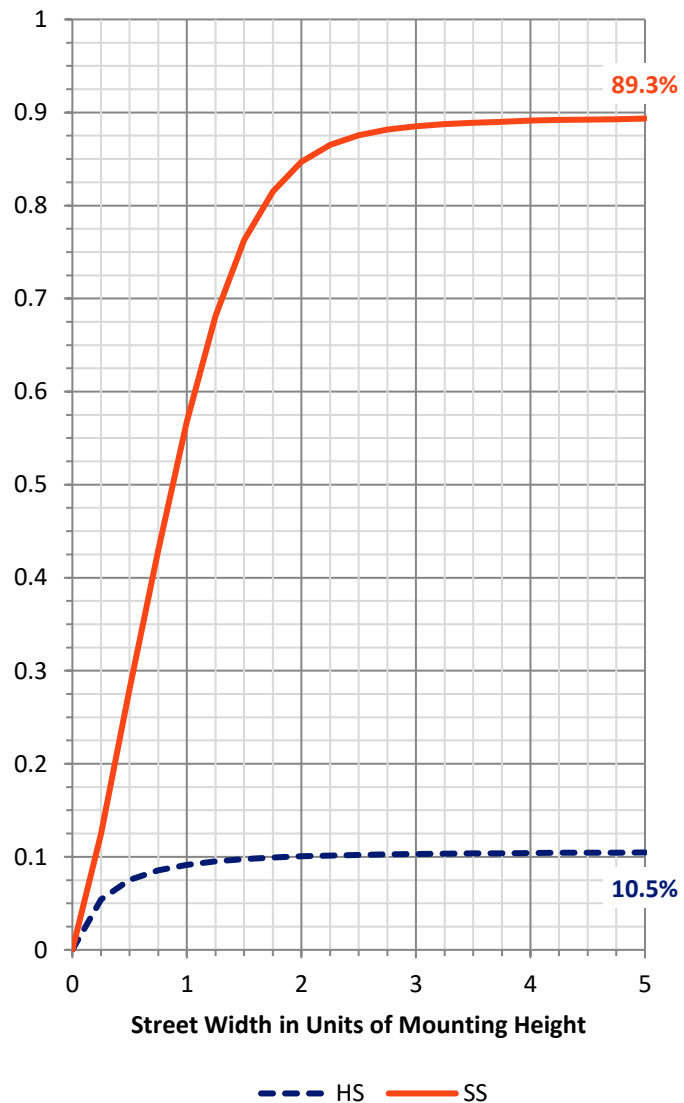
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2893.2	0.0	2893.2
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	24459.8	0.0	24459.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	27353.0	0.0	27353.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.3	1.3
10°-20°	1164.5	4.3
20°-30°	2107.0	7.7
30°-40°	3294.8	12.0
40°-50°	4998.2	18.3
50°-60°	6350.3	23.2
60°-70°	5933.7	21.7
70°-80°	2949.0	10.8
80°-90°	198.1	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°	27353.0	100.0
0°-180°	27353.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842121

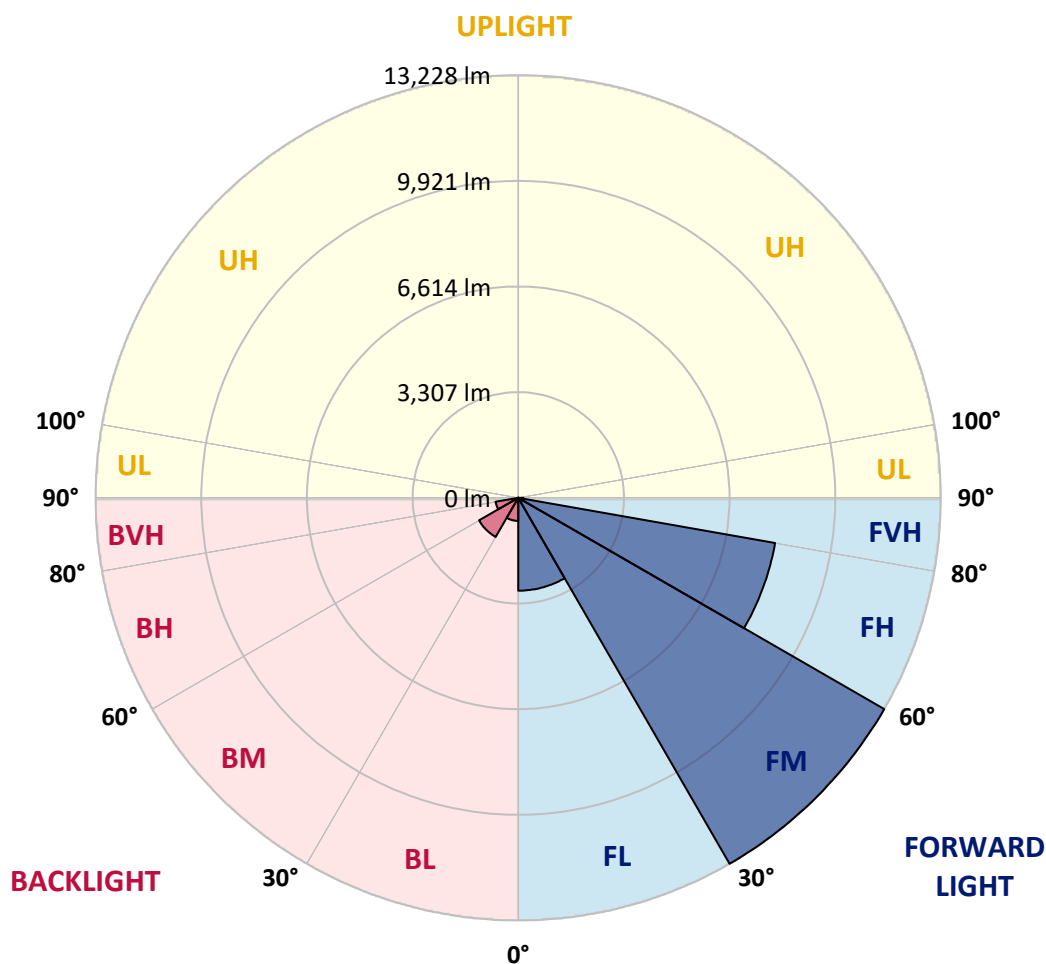
CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2906.3	10.6			
FM	(30°-60°)	13228.2	48.4			
FH	(60°-80°)	8162.2	29.8			G4/12000
FVH	(80°-90°)	163.1	0.6			G2/225
BL	(0°-30°)	722.6	2.6	B2/1000		
BM	(30°-60°)	1415.1	5.2	B2/2500		
BH	(60°-80°)	720.5	2.6	B2/1000		G2/1000
BVH	(80°-90°)	35.1	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: P842121

CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0
2.5°	4228.1	4262.6	4279.8	4285.5	4153.6	4096.2	4038.8	3906.9	3878.2	3803.6	3706.1
5°	4973.9	5019.8	5008.4	4985.4	4824.8	4641.2	4492.0	4245.3	4205.2	4027.3	3809.3
7.5°	5708.3	5748.4	5737.0	5650.9	5473.1	5214.9	4968.2	4606.8	4549.4	4262.6	3912.6
10°	6322.1	6356.5	6350.8	6264.8	6052.5	5737.0	5438.6	4956.7	4887.9	4480.6	3998.7
12.5°	6827.0	6872.9	6867.1	6809.8	6620.4	6276.2	5937.7	5358.3	5272.3	4744.5	4119.1
15°	7222.8	7280.2	7280.2	7257.2	7125.3	6838.5	6454.1	5800.1	5696.8	5048.5	4268.3
17.5°	7463.8	7509.7	7549.8	7590.0	7498.2	7280.2	6930.2	6241.8	6132.8	5346.8	4423.2
20°	7590.0	7635.9	7664.6	7750.6	7767.8	7658.8	7383.5	6677.8	6563.1	5685.3	4601.0
22.5°	7796.5	7836.7	7842.4	7917.0	7951.4	7980.1	7808.0	7108.1	7016.3	6058.2	4801.8
25°	8140.7	8186.6	8169.4	8203.8	8209.6	8244.0	8226.8	7601.5	7509.7	6482.8	5042.8
27.5°	8582.5	8639.9	8628.4	8594.0	8542.3	8513.6	8588.2	8100.6	8014.5	6907.3	5289.5
30°	9058.7	9127.5	9110.3	9041.4	8903.8	8783.3	8886.5	8571.0	8490.7	7343.3	5564.8
32.5°	9540.6	9620.9	9615.1	9500.4	9265.2	9058.7	9213.6	9012.8	8955.4	7813.7	5863.2
35°	9856.1	9959.4	9947.9	9879.0	9575.0	9397.1	9586.5	9466.0	9425.8	8387.4	6293.4
37.5°	10366.7	10475.7	10378.2	10206.0	9856.1	9764.3	9993.8	9976.6	9947.9	8995.5	6746.7
40°	11605.9	11766.5	11508.3	10802.7	10229.0	10148.7	10475.7	10544.5	10515.8	9597.9	7154.0
42.5°	12902.4	13143.4	12741.8	11766.5	10906.0	10613.4	11003.5	11101.0	11066.6	10114.3	7521.1
45°	13688.4	13791.6	13390.1	12632.8	12105.0	11175.6	11565.7	11726.3	11697.7	10733.8	7991.6
47.5°	14330.9	14290.8	13831.8	13321.2	13418.7	11967.3	12202.5	12518.0	12495.1	11416.5	8507.9
50°	14468.6	14376.8	14193.2	13872.0	14130.1	12770.5	12873.7	13418.7	13395.8	12173.8	9030.0
52.5°	13499.1	13378.6	13877.7	14147.3	14061.3	13355.6	13613.8	14405.5	14394.0	12994.2	9529.1
55°	11078.1	10980.5	12323.0	13717.1	13986.7	13768.7	14434.2	15432.4	15495.5	13866.2	9982.3
57.5°	8714.4	8611.2	9930.7	12638.5	13711.3	14147.3	15392.3	16608.5	16688.8	14812.8	10412.6
60°	6947.5	6792.6	7802.3	10940.4	13195.0	14439.9	16315.9	17899.3	17910.8	15679.1	10676.5
62.5°	4721.5	4549.4	5668.1	8789.0	12328.7	14485.8	17027.3	19012.3	19058.2	16327.4	10722.4
65°	2868.5	2725.1	3482.3	6419.7	11049.4	14095.7	17038.8	19832.7	19872.8	16625.7	10447.0
67.5°	1663.7	1606.3	1990.7	3998.7	8926.7	13045.8	16321.6	19706.4	19781.0	16499.5	9821.7
70°	969.5	963.8	1107.2	1979.2	6299.2	10963.3	14721.0	18645.1	18754.1	15839.7	8863.6
72.5°	711.4	722.9	780.2	1061.3	3648.7	7894.1	12466.4	16511.0	16677.3	14548.9	7498.2
75°	562.2	568.0	619.6	722.9	1916.1	4463.4	9339.8	13252.4	13384.3	12248.4	5857.4
77.5°	418.8	430.3	470.4	510.6	889.2	2048.1	5255.1	8163.7	7945.7	6723.7	2828.3
80°	304.1	332.7	350.0	367.2	470.4	791.7	1577.7	2845.5	2822.6	2937.3	1336.7
82.5°	195.1	218.0	235.2	246.7	281.1	378.6	470.4	636.8	688.4	1141.7	533.5
85°	86.1	97.5	109.0	131.9	120.5	131.9	195.1	126.2	109.0	172.1	97.5
87.5°	0.0	0.0	17.2	28.7	22.9	11.5	34.4	22.9	17.2	17.2	17.2
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: P842121

CATALOG NUMBER: ARCH4-270-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0	3620.0
2.5°	3654.4	3591.3	3459.4	3333.2	3258.6	3161.1	3075.0	2994.7	2989.0	2966.0	2925.8
5°	3700.3	3579.9	3333.2	3098.0	2920.1	2730.8	2570.2	2443.9	2398.0	2363.6	2317.7
7.5°	3746.2	3556.9	3189.7	2845.5	2564.4	2300.5	2111.2	1939.1	1887.5	1841.6	1812.9
10°	3763.4	3516.8	3023.4	2564.4	2197.3	1916.1	1715.3	1589.1	1543.2	1520.3	1503.1
12.5°	3815.1	3493.8	2868.5	2300.5	1876.0	1617.8	1474.4	1399.8	1382.6	1365.4	1348.2
15°	3883.9	3493.8	2713.6	2042.4	1623.6	1417.0	1331.0	1279.3	1267.9	1262.1	1250.7
17.5°	3958.5	3493.8	2564.4	1824.4	1440.0	1285.1	1222.0	1193.3	1187.5	1181.8	1176.1
20°	4061.8	3499.5	2403.8	1635.0	1308.0	1187.5	1135.9	1101.5	1095.8	1090.0	1090.0
22.5°	4165.0	3511.0	2248.9	1491.6	1222.0	1113.0	1049.9	1015.4	1004.0	1004.0	1004.0
25°	4297.0	3545.4	2105.5	1371.1	1147.4	1044.1	963.8	935.1	929.4	929.4	923.6
27.5°	4451.9	3585.6	1979.2	1279.3	1072.8	963.8	883.5	854.8	843.3	843.3	837.6
30°	4618.2	3625.8	1876.0	1210.5	998.2	883.5	808.9	774.5	763.0	768.8	763.0
32.5°	4801.8	3683.1	1795.7	1164.6	929.4	814.6	745.8	705.6	699.9	699.9	694.2
35°	5111.6	3843.8	1784.2	1141.7	872.0	763.0	694.2	654.0	648.3	648.3	642.5
37.5°	5444.4	4027.3	1835.8	1130.2	826.1	717.1	654.0	613.9	608.1	608.1	608.1
40°	5725.5	4165.0	1893.2	1130.2	797.4	677.0	619.6	585.2	585.2	585.2	585.2
42.5°	5914.8	4176.5	1881.7	1130.2	774.5	648.3	596.6	562.2	562.2	568.0	562.2
45°	6195.9	4233.9	1835.8	1113.0	757.3	625.3	573.7	545.0	539.3	545.0	545.0
47.5°	6528.7	4337.1	1789.9	1044.1	751.5	602.4	556.5	522.1	516.3	522.1	516.3
50°	6844.2	4428.9	1767.0	952.3	740.1	579.4	533.5	499.1	493.4	499.1	493.4
52.5°	7108.1	4469.1	1726.8	889.2	711.4	556.5	510.6	476.2	464.7	470.4	470.4
55°	7320.4	4457.6	1669.5	837.6	659.7	533.5	481.9	453.2	436.0	436.0	430.3
57.5°	7515.4	4463.4	1617.8	786.0	602.4	499.1	459.0	424.5	401.6	395.8	390.1
60°	7590.0	4434.7	1526.0	717.1	545.0	470.4	430.3	390.1	367.2	361.4	355.7
62.5°	7486.7	4331.4	1405.6	596.6	493.4	436.0	401.6	361.4	338.5	332.7	327.0
65°	7194.1	4136.3	1222.0	470.4	447.5	395.8	367.2	338.5	309.8	298.3	292.6
67.5°	6695.0	3855.2	992.5	378.6	395.8	361.4	344.2	309.8	275.4	263.9	258.2
70°	5983.6	3482.3	745.8	321.3	350.0	321.3	309.8	275.4	246.7	235.2	229.5
72.5°	4985.4	2880.0	522.1	275.4	304.1	281.1	269.6	246.7	218.0	200.8	200.8
75°	3769.2	2065.3	344.2	235.2	252.4	241.0	223.7	206.5	189.3	177.8	172.1
77.5°	1623.6	803.2	212.3	177.8	206.5	200.8	177.8	166.4	160.6	149.2	149.2
80°	699.9	327.0	131.9	131.9	149.2	143.4	137.7	126.2	126.2	120.5	114.7
82.5°	258.2	131.9	80.3	97.5	109.0	97.5	97.5	97.5	97.5	91.8	91.8
85°	63.1	40.2	40.2	57.4	63.1	57.4	63.1	57.4	57.4	57.4	51.6
87.5°	17.2	17.2	22.9	22.9	22.9	22.9	22.9	17.2	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)