

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: P799300

Luminaire Tested: **ARCH2-100-750-U-T2U-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-100-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 760mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8890 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

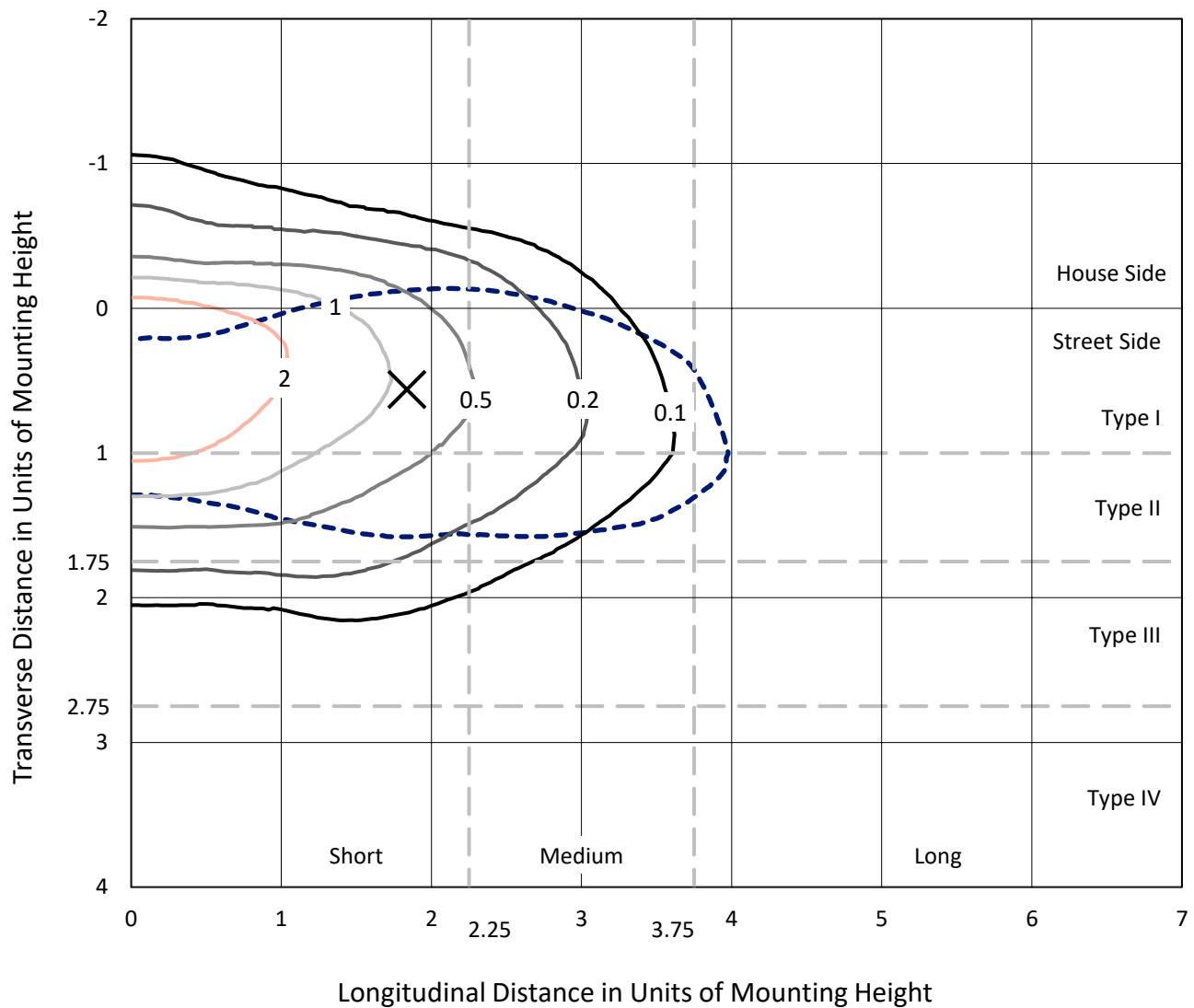
Input Watts (W): 103.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P799300
CATALOG NUMBER: ARCH2-100-750-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

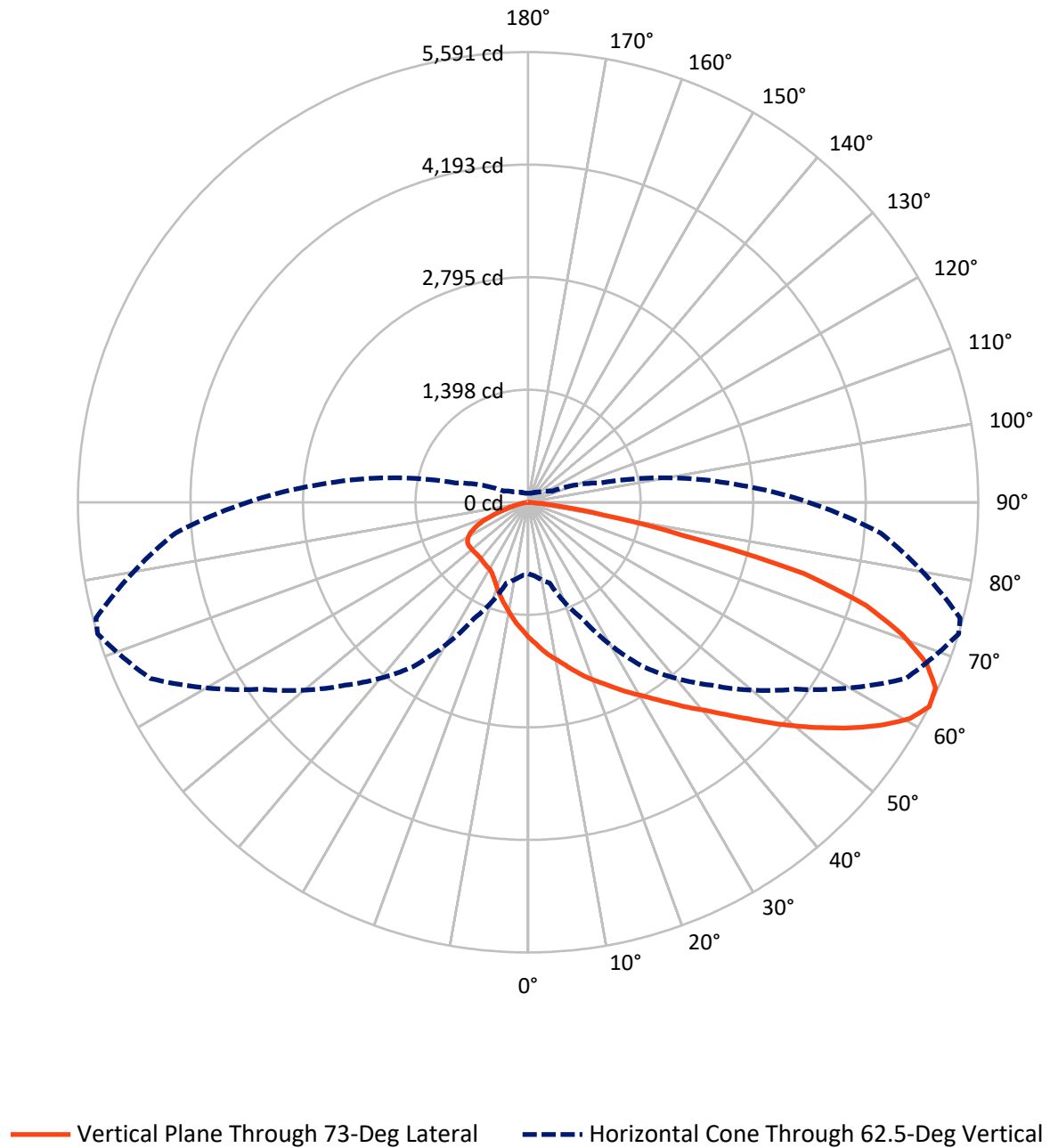
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
Type II - Short - N/A

REPORT NUMBER: P799300
CATALOG NUMBER: ARCH2-100-750-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P799300

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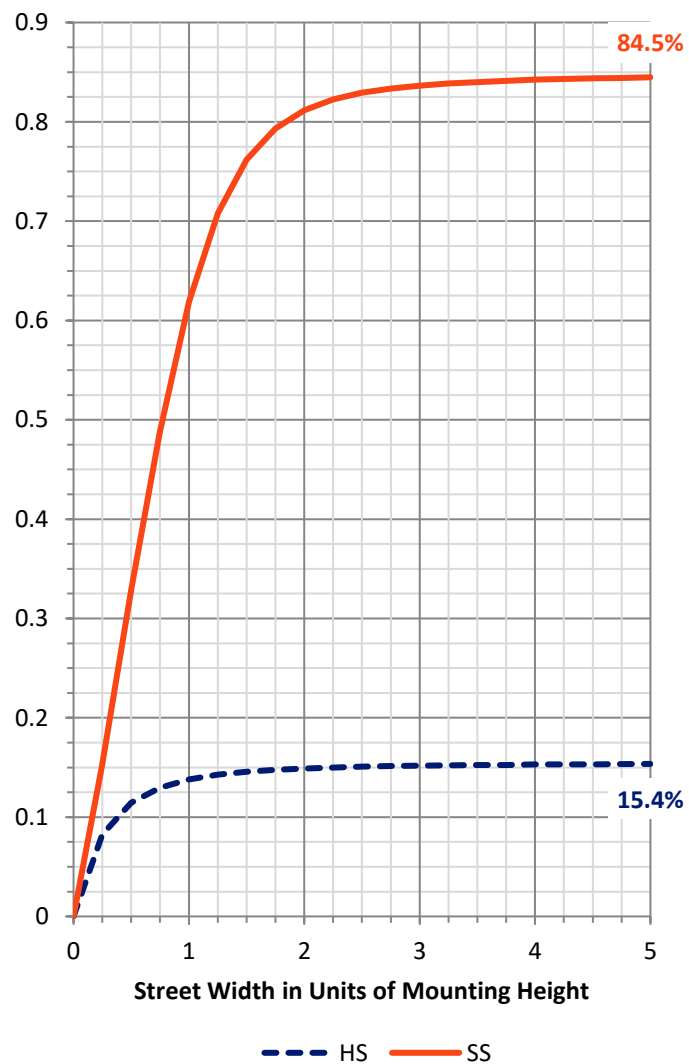
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1378.1	0.0	1378.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	7511.9	0.0	7511.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	8890.0	0.0	8890.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.8
10°-20°	490.7	5.5
20°-30°	816.8	9.2
30°-40°	1232.4	13.9
40°-50°	1722.6	19.4
50°-60°	1902.8	21.4
60°-70°	1657.5	18.6
70°-80°	837.3	9.4
80°-90°	67.2	0.8
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°	8890.0	100.0
0°-180°	8890.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799300

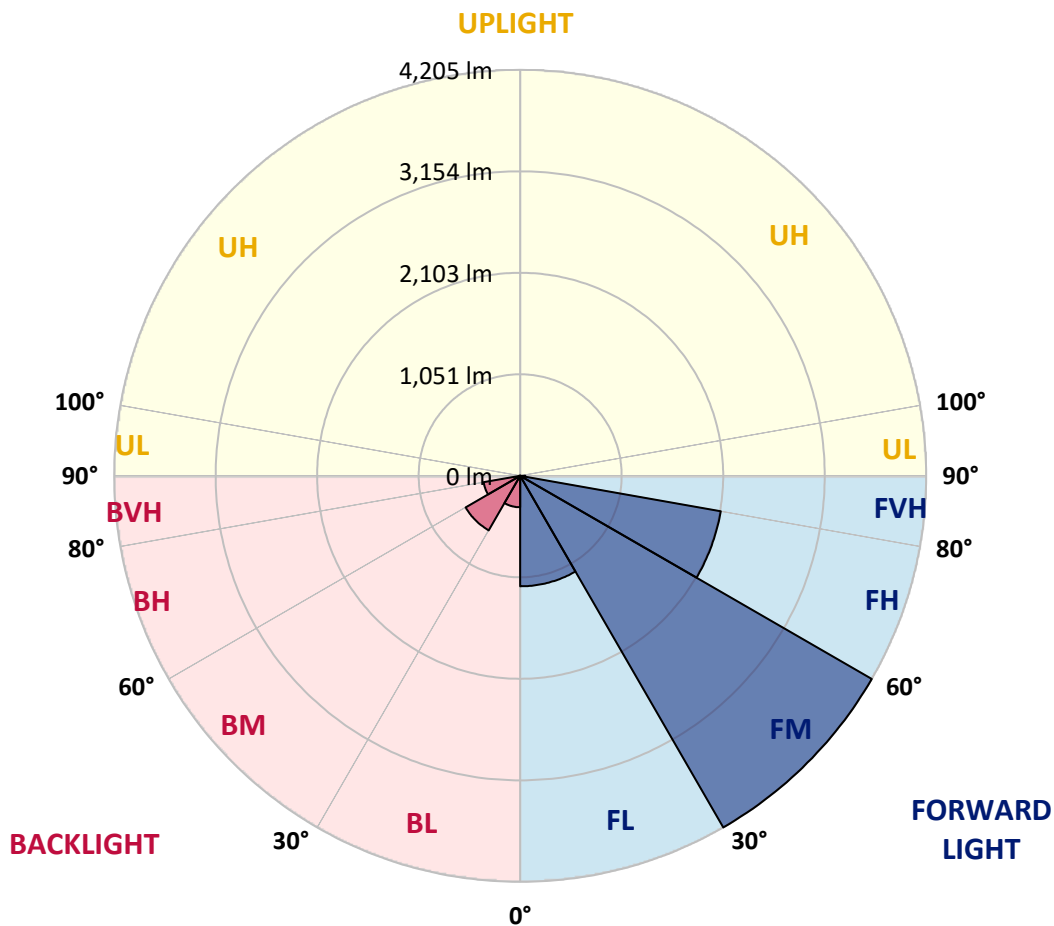
CATALOG NUMBER: ARCH2-100-750-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1144.4	12.9			
FM	(30°-60°)	4205.3	47.3			
FH	(60°-80°)	2110.2	23.7			G2/5000
FVH	(80°-90°)	52.0	0.6			G1/100
BL	(0°-30°)	325.7	3.7	B1/500		
BM	(30°-60°)	652.5	7.3	B1/1000		
BH	(60°-80°)	384.6	4.3	B1/500		G1/500
BVH	(80°-90°)	15.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



REPORT NUMBER: P799300

CATALOG NUMBER: ARCH2-100-750-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3
2.5°	1915.8	1937.1	1925.5	1933.2	1894.5	1869.3	1840.2	1784.1	1753.1	1749.2	1712.4
5°	2196.7	2219.9	2200.5	2194.7	2126.9	2068.8	2003.0	1904.2	1838.3	1826.7	1745.3
7.5°	2477.6	2498.9	2475.6	2458.2	2367.1	2264.5	2167.6	2022.3	1919.7	1900.3	1772.4
10°	2675.1	2694.5	2677.1	2659.6	2564.7	2460.1	2322.6	2132.7	1993.3	1962.3	1789.9
12.5°	2824.3	2835.9	2828.2	2812.7	2723.6	2611.2	2479.5	2256.7	2076.6	2037.8	1817.0
15°	2946.3	2965.7	2956.0	2944.4	2859.2	2746.8	2620.9	2386.5	2173.4	2125.0	1857.7
17.5°	3027.7	3041.2	3043.2	3043.2	2967.6	2857.2	2735.2	2504.7	2270.3	2208.3	1896.4
20°	3064.5	3080.0	3089.7	3105.2	3043.2	2948.3	2824.3	2605.4	2361.3	2291.6	1933.2
22.5°	3081.9	3095.5	3120.7	3155.5	3105.2	3025.8	2911.5	2698.4	2452.4	2378.8	1975.8
25°	3095.5	3112.9	3149.7	3215.6	3180.7	3112.9	3014.1	2804.9	2560.8	2485.3	2037.8
27.5°	3132.3	3153.6	3188.5	3267.9	3225.3	3192.3	3122.6	2919.2	2675.1	2597.7	2113.4
30°	3260.1	3277.6	3275.6	3326.0	3273.7	3264.0	3215.6	3029.6	2785.6	2708.1	2202.5
32.5°	3492.6	3510.0	3467.4	3448.0	3333.7	3335.7	3316.3	3147.8	2917.3	2837.9	2305.1
35°	3742.5	3761.8	3705.7	3672.7	3481.0	3424.8	3434.5	3295.0	3064.5	2985.1	2433.0
37.5°	3965.2	3988.5	3940.1	3891.6	3697.9	3568.1	3566.2	3459.7	3233.0	3151.7	2574.4
40°	4087.3	4114.4	4143.5	4116.3	3912.9	3769.6	3707.6	3628.2	3399.6	3316.3	2727.4
42.5°	4145.4	4220.9	4273.2	4255.8	4089.2	3943.9	3870.3	3804.5	3603.0	3521.6	2909.5
45°	3982.7	3984.6	4095.0	4189.9	4159.0	4062.1	4048.5	4002.0	3835.5	3758.0	3114.9
47.5°	3779.3	3763.8	3841.3	4009.8	4097.0	4122.1	4201.6	4220.9	4100.8	4023.4	3324.1
50°	3291.1	3300.8	3552.6	3794.8	3965.2	4128.0	4310.0	4445.6	4374.0	4300.4	3544.9
52.5°	2677.1	2700.3	2988.9	3521.6	3790.9	4069.8	4374.0	4670.3	4652.9	4583.2	3765.7
55°	2146.3	2183.1	2489.2	3066.4	3568.1	3940.1	4401.1	4875.7	4941.5	4877.6	3982.7
57.5°	1640.7	1679.5	1937.1	2529.9	3283.4	3728.9	4381.7	5055.8	5210.8	5170.1	4182.2
60°	1235.9	1274.6	1439.3	2051.4	2927.0	3492.6	4284.9	5174.0	5452.9	5410.3	4327.5
62.5°	885.3	916.2	1038.3	1596.2	2493.0	3211.7	4046.6	5175.9	5590.5	5555.6	4397.2
65°	637.3	637.3	736.1	1139.0	2086.3	2874.7	3686.3	4937.7	5561.4	5551.7	4348.8
67.5°	459.1	463.0	542.4	796.1	1664.0	2465.9	3219.5	4513.4	5336.7	5385.1	4174.5
70°	325.4	335.1	371.9	555.9	1257.2	1946.8	2719.7	3957.5	4931.9	5017.1	3837.4
72.5°	251.8	257.6	282.8	387.4	918.2	1447.0	2167.6	3337.6	4391.4	4488.3	3378.3
75°	193.7	199.5	218.9	284.8	658.6	1015.0	1540.0	2589.9	3541.0	3713.4	2713.9
77.5°	141.4	149.2	162.7	207.3	383.5	645.1	933.7	1456.7	1954.5	2035.9	1421.8
80°	65.9	75.5	94.9	133.7	207.3	304.1	331.2	561.8	939.5	982.1	771.0
82.5°	36.8	46.5	54.2	81.4	104.6	108.5	112.4	141.4	354.5	391.3	323.5
85°	17.4	23.2	25.2	34.9	34.9	31.0	36.8	27.1	58.1	69.7	67.8
87.5°	0.0	1.9	3.9	9.7	7.7	5.8	5.8	5.8	5.8	7.7	5.8
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: P799300

CATALOG NUMBER: ARCH2-100-750-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3
2.5°	1695.0	1669.8	1611.7	1561.3	1528.4	1499.3	1460.6	1443.1	1412.1	1418.0	1400.5
5°	1704.6	1658.2	1555.5	1460.6	1390.8	1328.9	1261.1	1222.3	1179.7	1175.8	1162.3
7.5°	1710.5	1638.8	1491.6	1357.9	1251.4	1156.4	1065.4	1015.0	962.7	951.1	939.5
10°	1704.6	1609.7	1425.7	1251.4	1110.0	991.8	889.1	825.2	771.0	757.4	745.8
12.5°	1710.5	1594.2	1363.7	1152.6	984.0	850.4	734.2	668.3	617.9	604.4	596.6
15°	1724.0	1584.5	1311.4	1063.5	871.7	722.5	608.2	552.1	511.4	497.8	494.0
17.5°	1735.6	1574.9	1255.2	976.3	759.3	610.2	511.4	464.9	430.0	416.5	412.6
20°	1751.1	1561.3	1199.1	893.0	660.6	521.1	433.9	393.2	366.1	356.4	354.5
22.5°	1764.7	1551.6	1146.8	809.7	569.5	449.4	375.8	342.9	323.5	313.8	313.8
25°	1799.6	1555.5	1102.2	732.2	501.7	393.2	331.2	306.1	290.6	284.8	284.8
27.5°	1840.2	1571.0	1067.3	666.4	443.6	350.6	300.3	278.9	271.2	263.4	265.4
30°	1898.4	1602.0	1044.1	612.1	401.0	317.7	275.1	259.6	251.8	249.9	249.9
32.5°	1972.0	1652.3	1042.2	577.3	370.0	292.5	257.6	244.1	240.2	238.3	238.3
35°	2059.1	1696.9	1030.5	561.8	350.6	275.1	244.1	234.4	232.5	232.5	232.5
37.5°	2163.7	1770.5	1022.8	540.5	340.9	265.4	234.4	226.6	226.6	226.6	226.6
40°	2272.2	1830.6	1011.2	521.1	337.1	259.6	228.6	218.9	218.9	218.9	218.9
42.5°	2402.0	1917.7	1007.3	511.4	331.2	255.7	220.8	209.2	211.1	211.1	213.1
45°	2558.9	2016.5	1005.4	501.7	329.3	251.8	213.1	199.5	201.5	199.5	199.5
47.5°	2717.8	2130.8	1011.2	495.9	327.4	247.9	207.3	189.8	189.8	187.9	187.9
50°	2884.3	2235.4	1015.0	490.1	323.5	240.2	197.6	182.1	178.2	174.3	176.3
52.5°	3041.2	2332.3	1017.0	480.4	311.9	228.6	189.8	172.4	166.6	160.8	162.7
55°	3198.2	2425.2	1020.9	468.8	296.4	217.0	180.2	162.7	155.0	147.2	147.2
57.5°	3339.6	2506.6	1011.2	439.7	278.9	205.3	170.5	151.1	139.5	131.7	131.7
60°	3436.4	2564.7	982.1	397.1	255.7	191.8	160.8	139.5	125.9	120.1	120.1
62.5°	3482.9	2574.4	929.8	327.4	226.6	178.2	149.2	127.8	116.2	112.4	112.4
65°	3438.4	2531.8	848.5	246.0	195.6	162.7	137.5	118.2	106.5	96.9	96.9
67.5°	3283.4	2411.7	736.1	186.0	166.6	147.2	125.9	108.5	94.9	87.2	87.2
70°	2971.5	2161.8	569.5	149.2	141.4	127.8	114.3	96.9	85.2	75.5	75.5
72.5°	2562.8	1832.5	401.0	120.1	120.1	108.5	96.9	85.2	73.6	65.9	65.9
75°	1966.2	1356.0	269.3	96.9	98.8	91.0	79.4	69.7	62.0	56.2	56.2
77.5°	1073.2	670.2	164.7	71.7	73.6	69.7	62.0	56.2	52.3	46.5	46.5
80°	521.1	294.4	94.9	50.4	52.3	50.4	46.5	40.7	40.7	36.8	36.8
82.5°	218.9	110.4	50.4	34.9	34.9	31.0	29.1	29.1	29.1	27.1	27.1
85°	54.2	21.3	21.3	19.4	19.4	19.4	17.4	17.4	17.4	13.6	15.5
87.5°	7.7	7.7	7.7	7.7	7.7	7.7	5.8	1.9	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)