

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: P836101

Luminaire Tested: **ARCH3-140-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13584 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 142.5
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

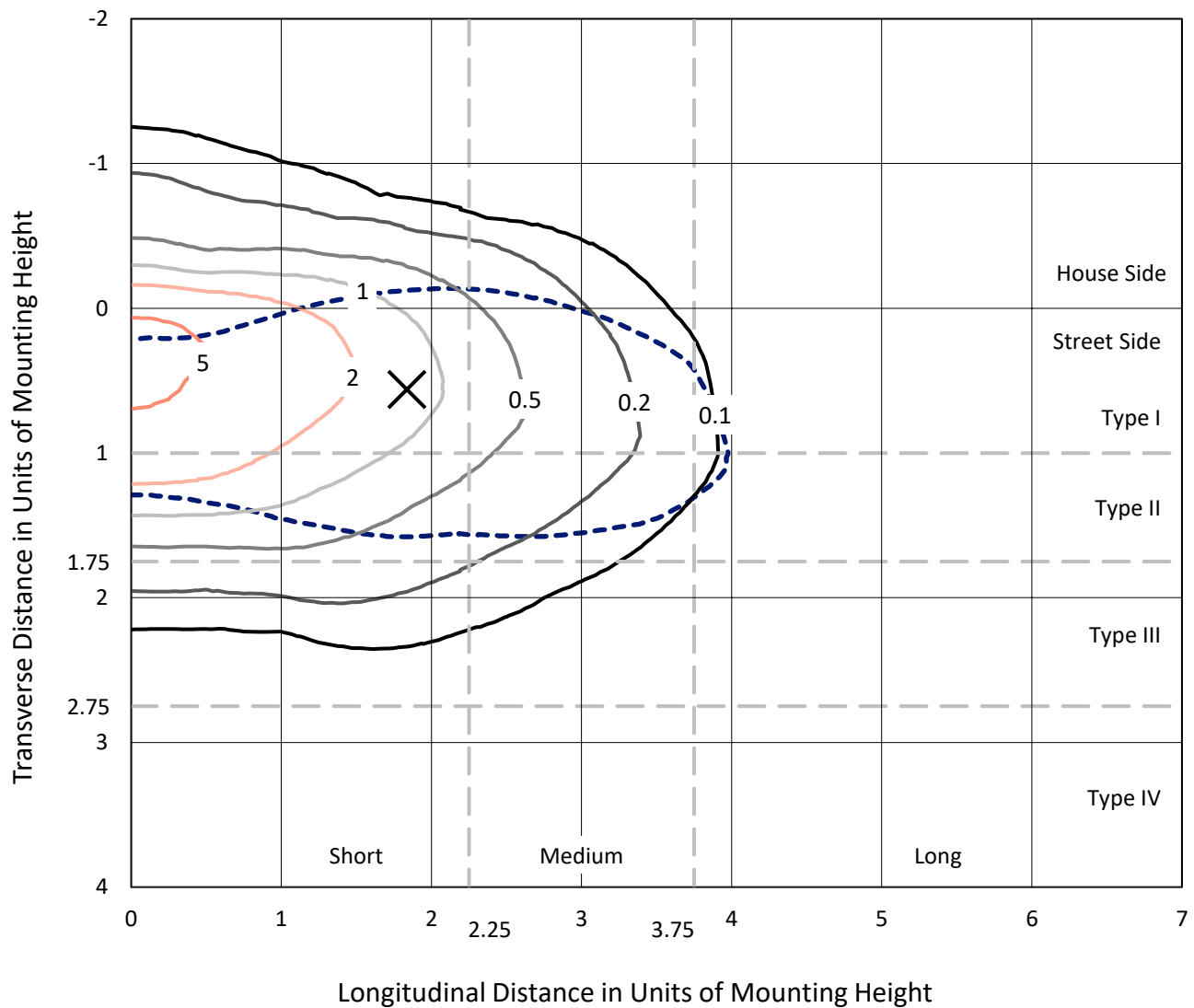


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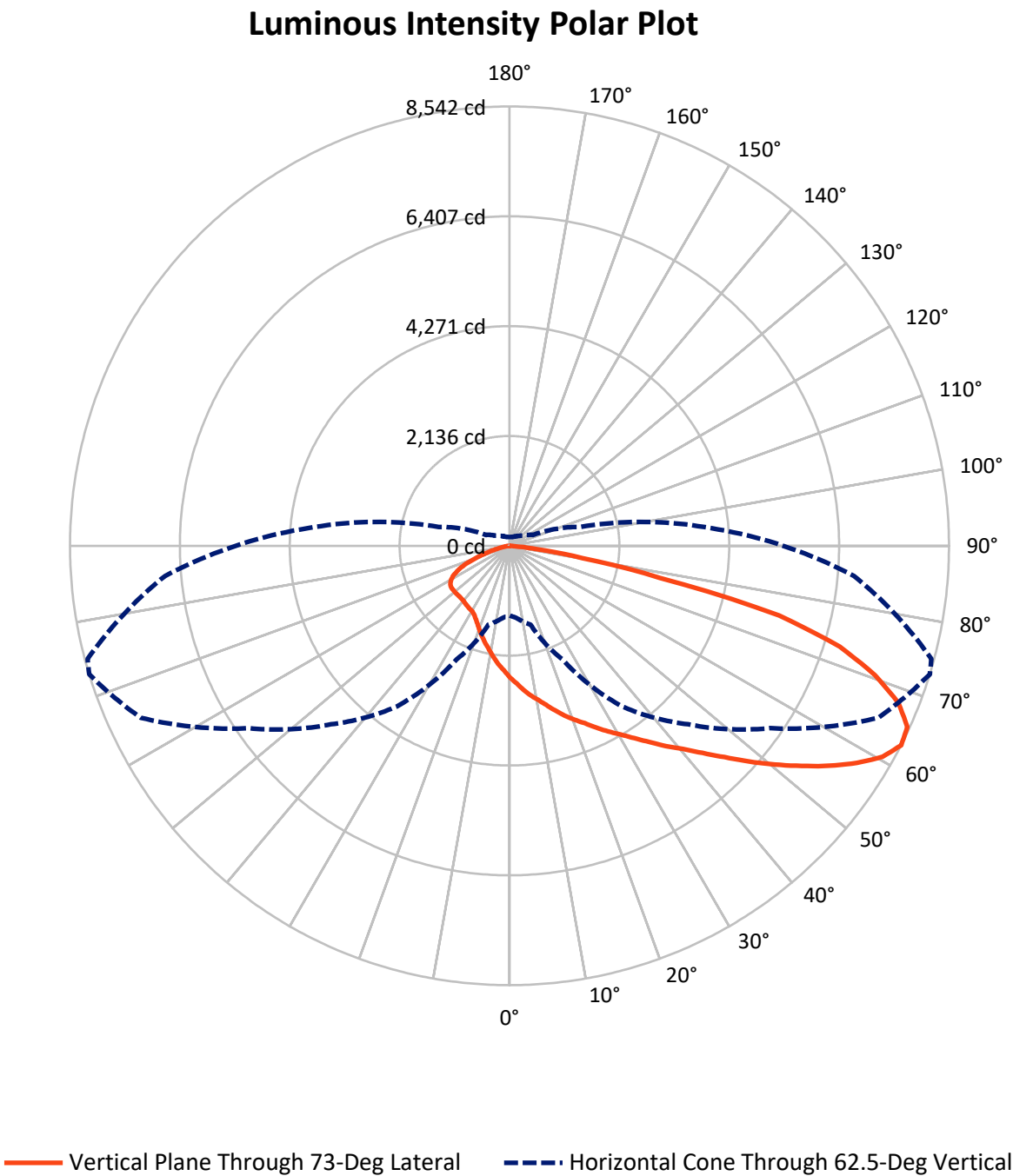
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type II - Short - N/A

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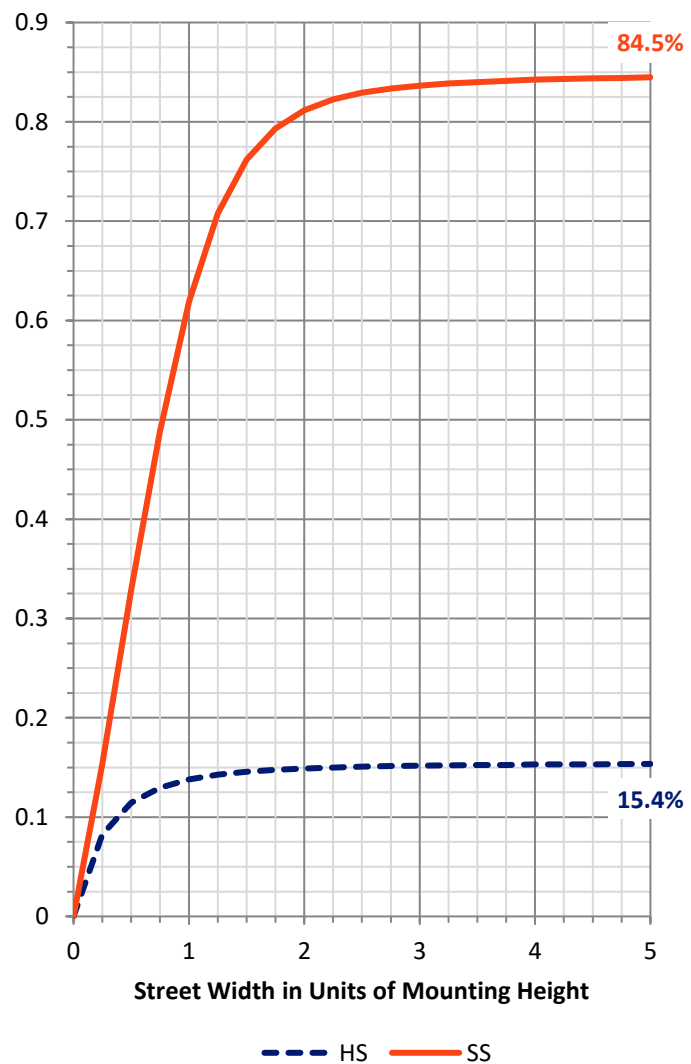
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2105.7	0.0	2105.7
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	11478.3	0.0	11478.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	13584.0	0.0	13584.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.5	1.8
10°-20°	749.8	5.5
20°-30°	1248.1	9.2
30°-40°	1883.2	13.9
40°-50°	2632.2	19.4
50°-60°	2907.4	21.4
60°-70°	2532.7	18.6
70°-80°	1279.4	9.4
80°-90°	102.7	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°	13584.0	100.0
0°-180°	13584.0	100.0

Coefficient of Utilization



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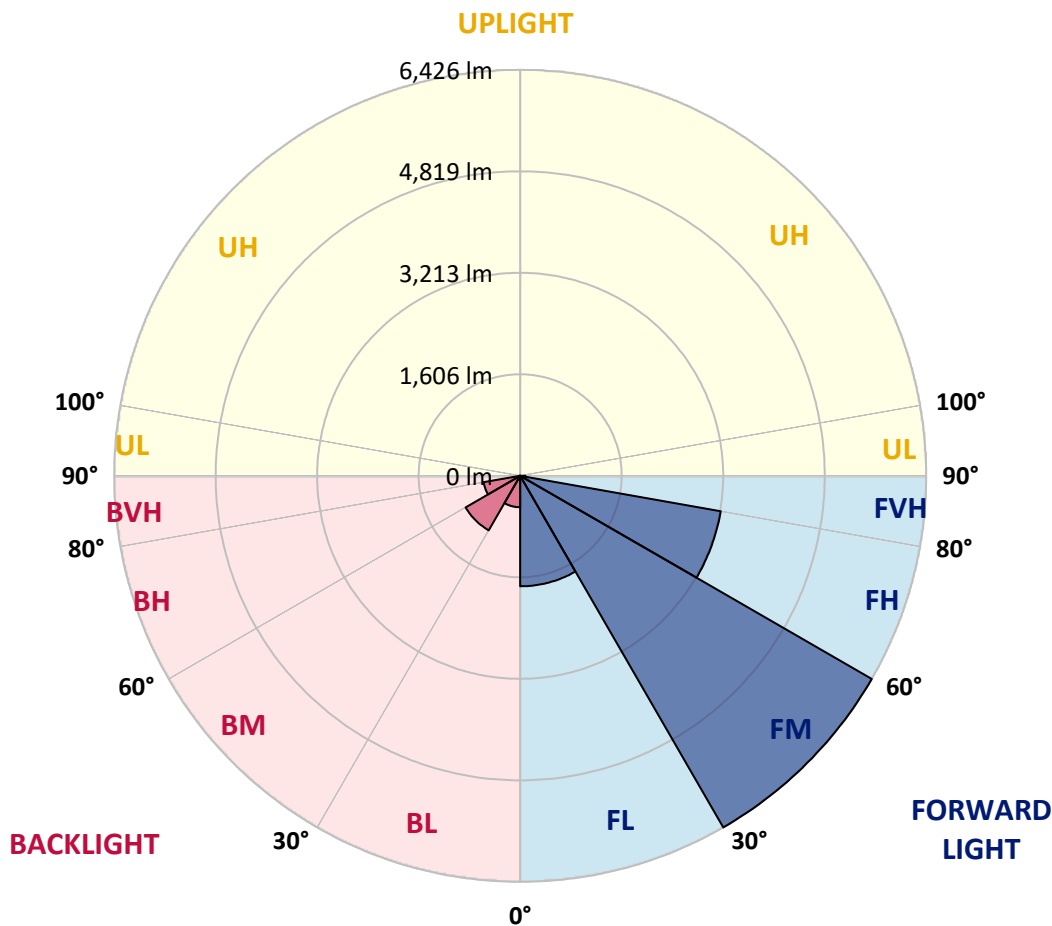
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1748.7	12.9			
FM	(30°-60°)	6425.7	47.3			
FH	(60°-80°)	3224.4	23.7			G2/5000
FVH	(80°-90°)	79.5	0.6			G1/100
BL	(0°-30°)	497.7	3.7	B1/500		
BM	(30°-60°)	997.1	7.3	B1/1000		
BH	(60°-80°)	587.7	4.3	B2/1000		G2/1000
BVH	(80°-90°)	23.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2
2.5°	2927.3	2959.9	2942.1	2954.0	2894.8	2856.3	2811.9	2726.1	2678.7	2672.8	2616.6
5°	3356.5	3392.1	3362.5	3353.6	3250.0	3161.2	3060.5	2909.6	2809.0	2791.2	2666.9
7.5°	3785.7	3818.3	3782.8	3756.1	3617.0	3460.1	3312.1	3090.1	2933.3	2903.7	2708.3
10°	4087.6	4117.2	4090.6	4064.0	3918.9	3759.1	3548.9	3258.9	3045.7	2998.4	2735.0
12.5°	4315.5	4333.3	4321.5	4297.8	4161.6	3990.0	3788.7	3448.3	3173.0	3113.8	2776.4
15°	4502.0	4531.6	4516.8	4499.1	4368.8	4197.1	4004.8	3646.6	3321.0	3247.0	2838.6
17.5°	4626.3	4647.1	4650.0	4650.0	4534.6	4365.9	4179.4	3827.2	3469.0	3374.3	2897.7
20°	4682.6	4706.3	4721.1	4744.7	4650.0	4505.0	4315.5	3981.1	3608.1	3501.6	2954.0
22.5°	4709.2	4729.9	4768.4	4821.7	4744.7	4623.4	4448.7	4123.2	3747.2	3634.8	3019.1
25°	4729.9	4756.6	4812.8	4913.4	4860.2	4756.6	4605.6	4285.9	3913.0	3797.6	3113.8
27.5°	4786.2	4818.7	4872.0	4993.4	4928.2	4877.9	4771.4	4460.6	4087.6	3969.2	3229.3
30°	4981.5	5008.2	5005.2	5082.2	5002.2	4987.4	4913.4	4629.3	4256.3	4138.0	3365.4
32.5°	5336.7	5363.4	5298.2	5268.6	5094.0	5097.0	5067.4	4809.8	4457.6	4336.3	3522.3
35°	5718.5	5748.1	5662.3	5612.0	5319.0	5233.1	5247.9	5034.8	4682.6	4561.2	3717.6
37.5°	6058.9	6094.4	6020.5	5946.5	5650.5	5452.1	5449.2	5286.4	4940.1	4815.8	3933.7
40°	6245.4	6286.8	6331.2	6289.8	5979.0	5760.0	5665.3	5543.9	5194.6	5067.4	4167.5
42.5°	6334.2	6449.6	6529.6	6502.9	6248.4	6026.4	5913.9	5813.3	5505.4	5381.1	4445.8
45°	6085.6	6088.5	6257.2	6402.3	6354.9	6206.9	6186.2	6115.2	5860.6	5742.2	4759.5
47.5°	5774.8	5751.1	5869.5	6127.0	6260.2	6298.7	6420.0	6449.6	6266.1	6147.7	5079.2
50°	5028.9	5043.7	5428.5	5798.5	6058.9	6307.6	6585.8	6793.0	6683.5	6571.0	5416.6
52.5°	4090.6	4126.1	4567.1	5381.1	5792.5	6218.8	6683.5	7136.3	7109.7	7003.1	5754.1
55°	3279.6	3335.8	3803.5	4685.5	5452.1	6020.5	6724.9	7450.1	7550.7	7453.0	6085.6
57.5°	2507.0	2566.2	2959.9	3865.6	5017.0	5697.8	6695.3	7725.4	7962.1	7900.0	6390.4
60°	1888.4	1947.6	2199.2	3134.5	4472.4	5336.7	6547.3	7905.9	8332.1	8267.0	6612.4
62.5°	1352.7	1400.0	1586.5	2439.0	3809.4	4907.5	6183.2	7908.9	8542.3	8489.0	6719.0
65°	973.8	973.8	1124.8	1740.4	3187.8	4392.5	5632.7	7544.8	8497.9	8483.1	6645.0
67.5°	701.5	707.4	828.8	1216.5	2542.6	3768.0	4919.4	6896.6	8154.5	8228.5	6378.6
70°	497.3	512.1	568.3	849.5	1921.0	2974.7	4155.7	6047.1	7535.9	7666.2	5863.6
72.5°	384.8	393.7	432.1	592.0	1403.0	2211.1	3312.1	5099.9	6710.1	6858.1	5162.1
75°	296.0	304.9	334.5	435.1	1006.4	1551.0	2353.1	3957.4	5410.7	5674.1	4146.8
77.5°	216.1	227.9	248.6	316.7	586.1	985.6	1426.7	2225.9	2986.5	3110.9	2172.6
80°	100.6	115.4	145.0	204.2	316.7	464.7	506.1	858.4	1435.6	1500.7	1178.0
82.5°	56.2	71.0	82.9	124.3	159.8	165.8	171.7	216.1	541.7	597.9	494.3
85°	26.6	35.5	38.5	53.3	53.3	47.4	56.2	41.4	88.8	106.6	103.6
87.5°	0.0	3.0	5.9	14.8	11.8	8.9	8.9	8.9	8.9	11.8	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2	2572.2
2.5°	2589.9	2551.4	2462.6	2385.7	2335.4	2291.0	2231.8	2205.1	2157.8	2166.7	2140.0
5°	2604.7	2533.7	2376.8	2231.8	2125.2	2030.5	1926.9	1867.7	1802.6	1796.7	1775.9
7.5°	2613.6	2504.1	2279.1	2074.9	1912.1	1767.1	1627.9	1551.0	1471.1	1453.3	1435.6
10°	2604.7	2459.7	2178.5	1912.1	1696.0	1515.5	1358.6	1260.9	1178.0	1157.3	1139.6
12.5°	2613.6	2436.0	2083.8	1761.1	1503.6	1299.4	1121.8	1021.2	944.2	923.5	911.7
15°	2634.3	2421.2	2003.9	1625.0	1332.0	1104.0	929.4	843.6	781.4	760.7	754.8
17.5°	2652.1	2406.4	1918.0	1491.8	1160.3	932.4	781.4	710.4	657.1	636.4	630.5
20°	2675.8	2385.7	1832.2	1364.5	1009.3	796.2	663.0	600.9	559.4	544.6	541.7
22.5°	2696.5	2370.9	1752.3	1237.2	870.2	686.7	574.2	523.9	494.3	479.5	479.5
25°	2749.8	2376.8	1684.2	1118.8	766.6	600.9	506.1	467.7	444.0	435.1	435.1
27.5°	2811.9	2400.5	1630.9	1018.2	677.8	535.7	458.8	426.2	414.4	402.5	405.5
30°	2900.7	2447.8	1595.4	935.3	612.7	485.4	420.3	396.6	384.8	381.8	381.8
32.5°	3013.2	2524.8	1592.4	882.1	565.3	446.9	393.7	372.9	367.0	364.1	364.1
35°	3146.4	2592.9	1574.7	858.4	535.7	420.3	372.9	358.1	355.2	355.2	355.2
37.5°	3306.2	2705.4	1562.8	825.8	520.9	405.5	358.1	346.3	346.3	346.3	346.3
40°	3472.0	2797.1	1545.1	796.2	515.0	396.6	349.3	334.5	334.5	334.5	334.5
42.5°	3670.3	2930.3	1539.2	781.4	506.1	390.7	337.4	319.7	322.6	322.6	325.6
45°	3910.0	3081.3	1536.2	766.6	503.2	384.8	325.6	304.9	307.8	304.9	304.9
47.5°	4152.7	3255.9	1545.1	757.7	500.2	378.9	316.7	290.1	290.1	287.1	287.1
50°	4407.3	3415.7	1551.0	748.9	494.3	367.0	301.9	278.2	272.3	266.4	269.4
52.5°	4647.1	3563.7	1554.0	734.1	476.5	349.3	290.1	263.4	254.6	245.7	248.6
55°	4886.8	3705.8	1559.9	716.3	452.9	331.5	275.3	248.6	236.8	225.0	225.0
57.5°	5102.9	3830.1	1545.1	671.9	426.2	313.8	260.5	230.9	213.1	201.3	201.3
60°	5250.9	3918.9	1500.7	606.8	390.7	293.0	245.7	213.1	192.4	183.5	183.5
62.5°	5321.9	3933.7	1420.8	500.2	346.3	272.3	227.9	195.4	177.6	171.7	171.7
65°	5253.8	3868.6	1296.4	375.9	299.0	248.6	210.2	180.6	162.8	148.0	148.0
67.5°	5017.0	3685.1	1124.8	284.2	254.6	225.0	192.4	165.8	145.0	133.2	133.2
70°	4540.5	3303.3	870.2	227.9	216.1	195.4	174.6	148.0	130.2	115.4	115.4
72.5°	3916.0	2800.1	612.7	183.5	183.5	165.8	148.0	130.2	112.5	100.6	100.6
75°	3004.3	2071.9	411.4	148.0	151.0	139.1	121.4	106.6	94.7	85.8	85.8
77.5°	1639.8	1024.1	251.6	109.5	112.5	106.6	94.7	85.8	79.9	71.0	71.0
80°	796.2	449.9	145.0	77.0	79.9	77.0	71.0	62.2	62.2	56.2	56.2
82.5°	334.5	168.7	77.0	53.3	53.3	47.4	44.4	44.4	44.4	41.4	41.4
85°	82.9	32.6	32.6	29.6	29.6	29.6	26.6	26.6	26.6	20.7	23.7
87.5°	11.8	11.8	11.8	11.8	11.8	11.8	8.9	3.0	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)