

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: P237211

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16812.2 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 181
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: 28.75 FT

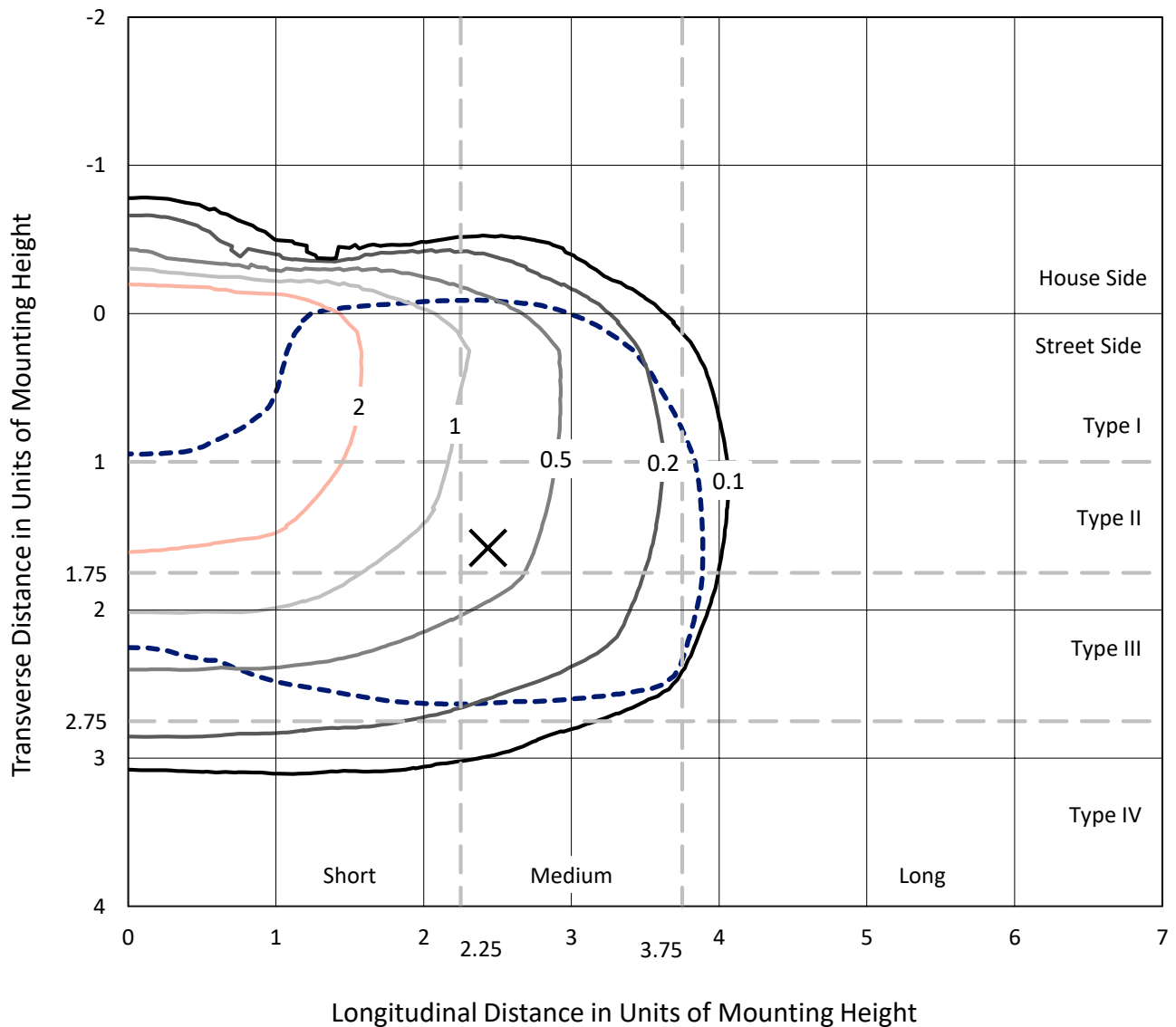


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

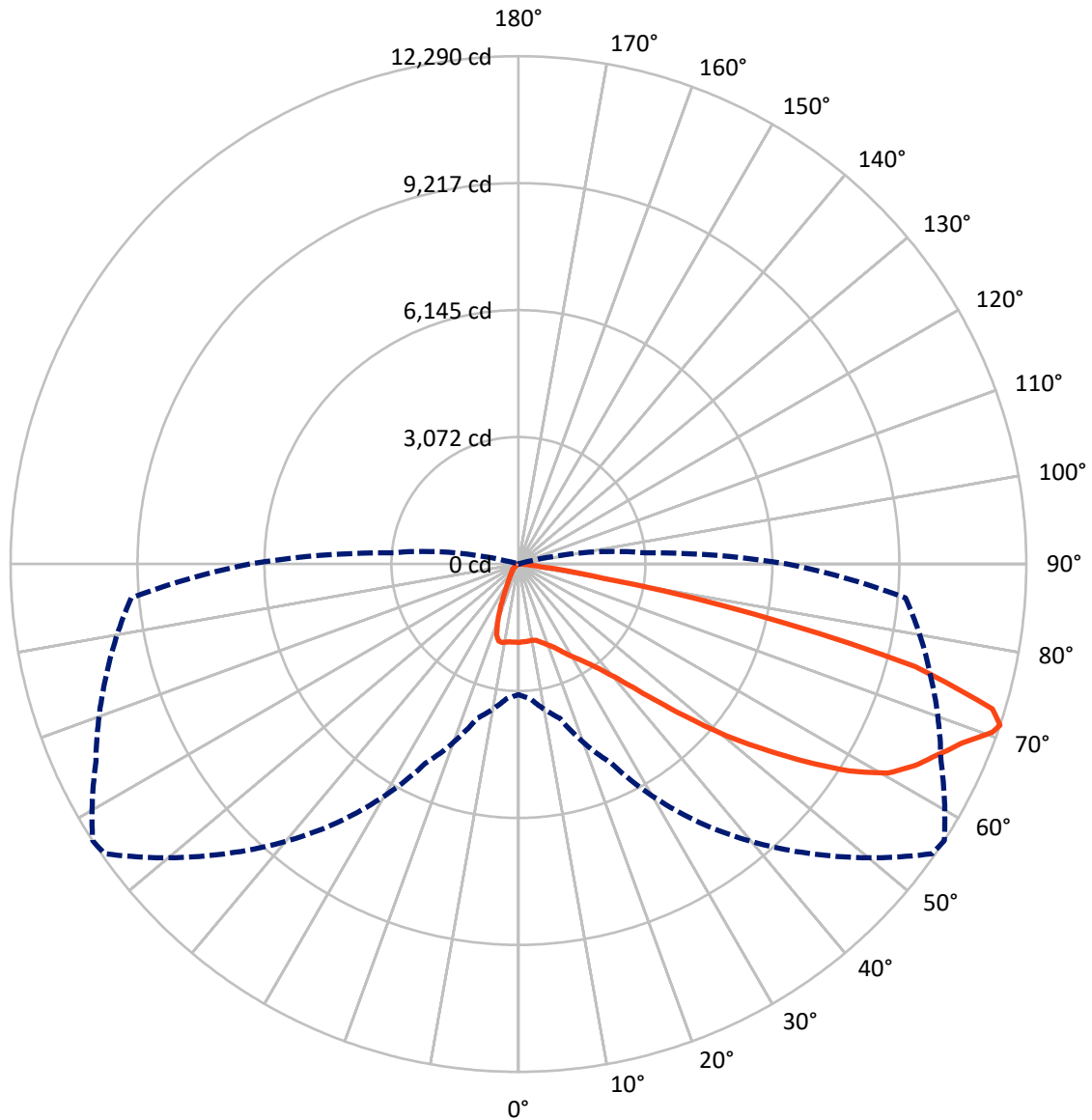


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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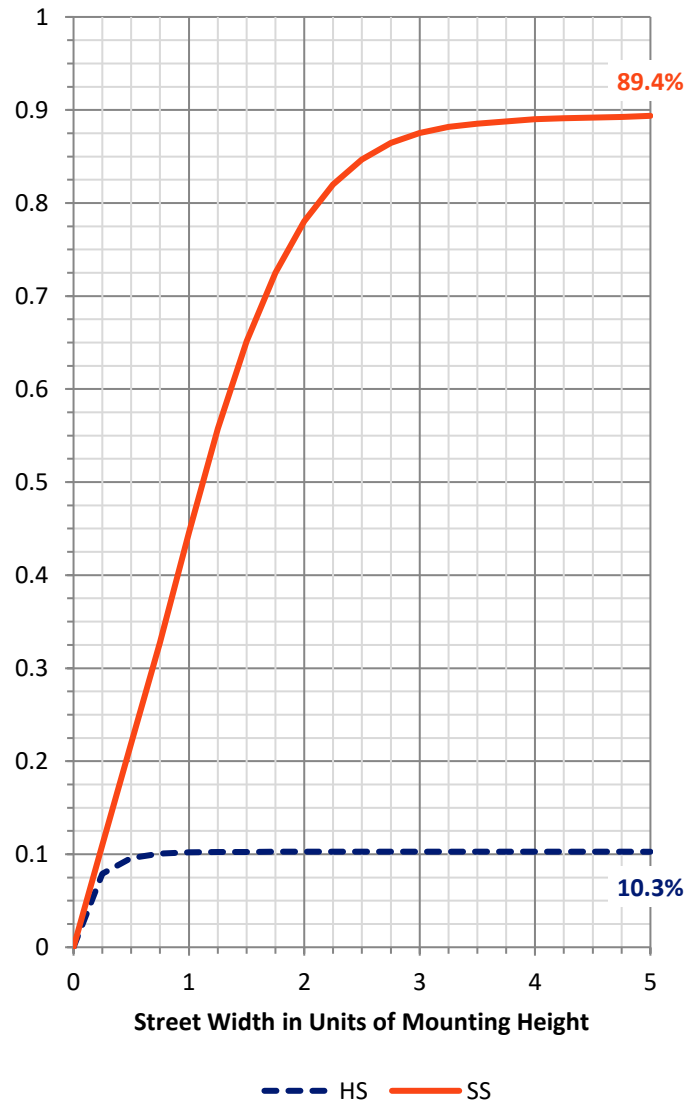
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1742.3	0.0	1742.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	15069.9	0.0	15069.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	16812.2	0.0	16812.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	1.1
10°-20°	477.1	2.8
20°-30°	744.3	4.4
30°-40°	1257.9	7.5
40°-50°	2443.3	14.5
50°-60°	4103.0	24.4
60°-70°	4896.5	29.1
70°-80°	2580.5	15.3
80°-90°	131.1	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°	16812.2	100.0
0°-180°	16812.2	100.0

Coefficient of Utilization



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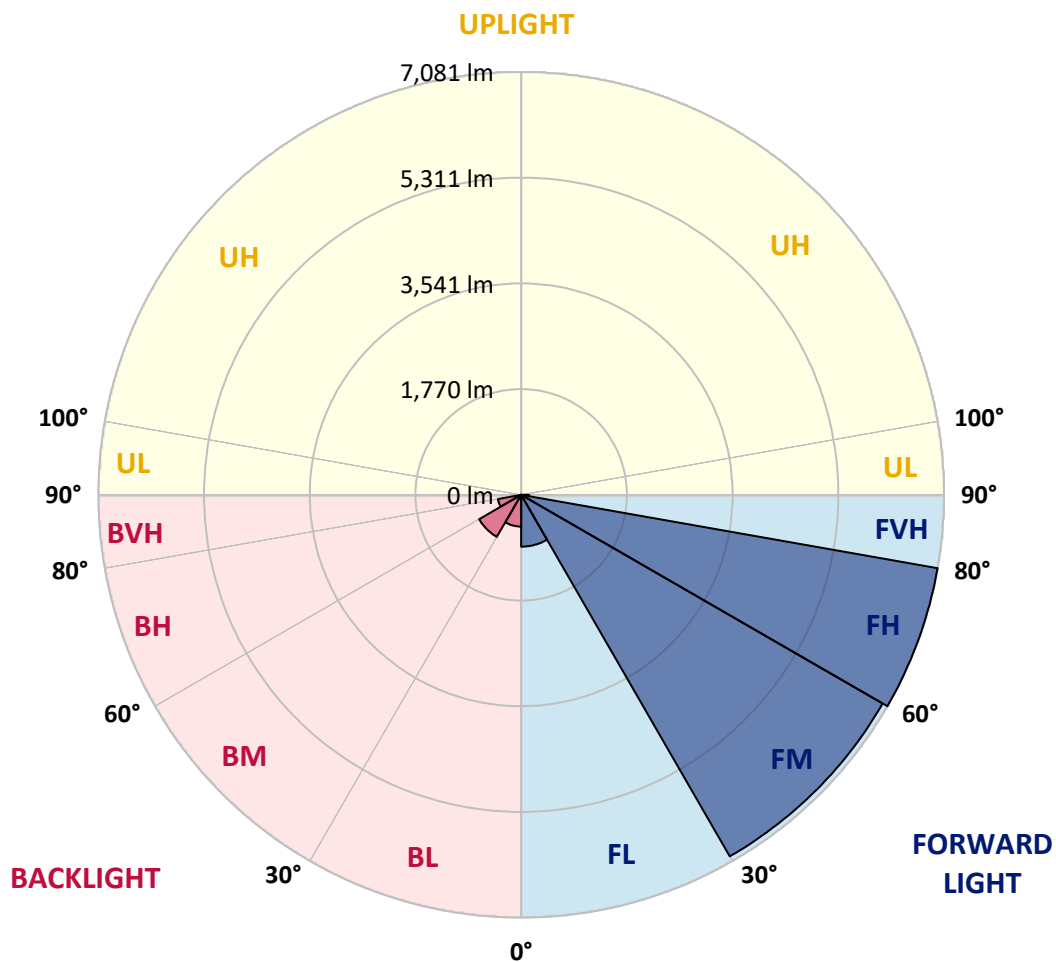
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	868.0	5.2			
FM	(30°-60°)	6990.7	41.6			
FH	(60°-80°)	7081.4	42.1			G3/7500
FVH	(80°-90°)	129.9	0.8			G2/225
BL	(0°-30°)	531.8	3.2	B2/1000		
BM	(30°-60°)	813.5	4.8	B1/1000		
BH	(60°-80°)	395.7	2.4	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0
2.5°	1872.6	1872.6	1872.6	1876.5	1880.5	1880.5	1888.3	1884.4	1884.4	1884.4	1892.2
5°	1821.7	1825.6	1829.5	1837.3	1853.0	1864.7	1884.4	1884.4	1888.3	1896.1	1900.0
7.5°	1751.2	1755.1	1766.8	1782.5	1813.9	1841.3	1872.6	1880.5	1892.2	1911.8	1919.7
10°	1708.0	1715.9	1731.5	1751.2	1786.4	1821.7	1860.8	1872.6	1907.9	1943.1	1962.7
12.5°	1696.4	1700.2	1715.9	1747.2	1790.4	1833.4	1884.4	1896.1	1947.1	2001.9	2033.2
15°	1715.9	1719.8	1727.7	1763.0	1813.9	1868.7	1935.3	1951.0	2013.7	2076.3	2115.5
17.5°	1751.2	1751.2	1759.0	1790.4	1845.2	1907.9	1994.0	2017.6	2088.0	2158.6	2201.7
20°	1774.7	1774.7	1786.4	1817.8	1880.5	1962.7	2064.6	2095.9	2174.3	2252.6	2291.8
22.5°	1798.1	1802.1	1813.9	1849.1	1919.7	2033.2	2150.8	2182.1	2272.2	2354.4	2393.6
25°	1864.7	1860.8	1864.7	1896.1	1978.4	2119.5	2268.3	2307.5	2401.5	2491.6	2511.1
27.5°	2048.9	2041.1	1990.2	1970.5	2033.2	2209.6	2417.1	2456.3	2566.1	2656.1	2656.1
30°	2472.0	2456.3	2331.0	2170.4	2119.5	2291.8	2558.2	2613.0	2754.1	2832.4	2808.9
32.5°	3008.7	2973.4	2812.8	2538.6	2334.9	2401.5	2707.0	2769.7	2950.0	3016.6	2965.6
35°	3596.4	3592.4	3392.6	3040.0	2750.1	2628.7	2899.0	2973.4	3200.7	3259.4	3177.2
37.5°	4219.3	4234.9	4101.7	3615.9	3275.1	3000.8	3153.7	3239.9	3518.0	3588.5	3510.2
40°	4912.6	4908.7	4857.8	4282.0	3905.8	3529.8	3521.9	3600.3	3937.1	4046.9	3937.1
42.5°	5790.2	5782.3	5598.2	5081.1	4669.8	4219.3	4058.7	4086.1	4462.1	4642.4	4481.8
45°	6683.4	6628.6	6417.0	5970.5	5606.1	5073.3	4767.7	4767.7	5089.0	5335.8	5085.0
47.5°	7180.9	7126.1	7039.9	6793.1	6683.4	6088.0	5637.4	5582.5	5833.3	6084.0	5731.5
50°	7835.2	7835.2	7619.8	7525.7	7713.8	7294.6	6597.2	6542.4	6663.8	6863.6	6401.3
52.5°	8352.3	8258.3	8105.5	8187.8	8724.4	8532.5	7557.0	7451.3	7545.3	7596.2	6985.1
55°	8567.8	8477.7	8465.9	8767.6	9598.1	9331.7	8540.3	8446.3	8438.5	8187.8	7494.3
57.5°	8610.9	8532.5	8681.4	9210.2	10448.2	9985.9	9519.8	9449.2	9229.9	8603.0	8015.4
60°	8246.5	8285.7	8646.1	9453.2	10949.7	10554.0	10346.3	10272.0	9766.5	8955.6	8595.2
62.5°	7498.2	7592.3	8266.2	9476.6	10765.5	10785.2	10804.7	10753.8	10181.8	9276.8	9178.9
65°	6612.9	6640.3	7451.3	9151.5	10444.3	10714.6	11141.7	11137.7	10499.2	9637.3	9837.1
67.5°	5449.4	5496.4	6197.6	8054.6	9801.8	10683.3	11584.3	11572.5	10859.5	10048.7	10228.8
70°	4054.7	4113.5	4681.5	6264.2	8367.9	10291.5	12164.1	12172.0	11239.6	10362.1	9958.5
71°	3161.5	3267.3	3862.8	5320.1	7635.4	9895.8	12218.9	12289.5	11282.6	10318.9	9402.2
72.5°	1551.4	1676.7	2425.0	3745.2	6283.8	9010.5	11858.6	11995.6	11012.4	9782.3	8038.9
75°	403.6	427.0	724.8	1531.8	3369.1	5970.5	9562.9	9911.5	9002.6	7447.4	4912.6
77.5°	254.6	262.5	340.8	595.5	1261.5	2268.3	5617.8	5790.2	5143.8	3772.6	1731.5
80°	180.2	184.1	215.4	383.9	736.5	662.1	2021.5	2095.9	1860.8	999.0	309.4
82.5°	109.7	109.7	156.7	246.8	454.4	360.4	532.8	568.0	501.5	278.1	101.9
85°	62.7	66.6	97.9	168.5	215.4	176.3	199.8	211.5	215.4	184.1	43.1
87.5°	50.9	54.8	86.2	141.1	117.5	86.2	86.2	90.1	94.0	109.7	19.5
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°	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0	1900.0
2.5°	1892.2	1892.2	1896.1	1892.2	1892.2	1892.2	1896.1	1896.1	1896.1	1903.9	1907.9
5°	1900.0	1900.0	1900.0	1896.1	1892.2	1892.2	1900.0	1903.9	1903.9	1915.7	1915.7
7.5°	1919.7	1919.7	1911.8	1903.9	1896.1	1884.4	1888.3	1892.2	1888.3	1892.2	1892.2
10°	1962.7	1962.7	1951.0	1935.3	1911.8	1876.5	1829.5	1770.7	1715.9	1696.4	1688.5
12.5°	2033.2	2029.3	2005.8	1978.4	1927.4	1806.0	1629.8	1422.1	1249.7	1202.7	1187.0
15°	2111.6	2103.7	2076.3	2029.3	1892.2	1570.9	1202.7	936.3	771.8	732.6	724.8
17.5°	2193.8	2182.1	2142.9	2048.9	1731.5	1167.5	775.7	587.7	497.6	489.7	493.6
20°	2280.1	2264.4	2209.6	2009.7	1398.6	779.6	501.5	454.4	446.6	446.6	450.5
22.5°	2378.0	2358.4	2283.9	1868.7	1018.6	517.1	431.0	427.0	423.1	419.2	419.2
25°	2491.6	2468.1	2354.4	1614.0	701.2	423.1	411.3	399.6	391.8	383.9	380.0
27.5°	2628.7	2597.4	2409.4	1300.7	481.9	395.7	387.8	368.3	352.6	337.0	337.0
30°	2765.9	2726.7	2393.6	979.4	391.8	368.3	352.6	329.1	305.6	289.9	286.0
32.5°	2910.8	2871.6	2291.8	658.2	356.5	337.0	317.3	282.0	254.6	235.1	231.2
35°	3126.2	3094.9	2092.0	434.9	321.2	297.8	270.3	235.1	199.8	180.2	176.3
37.5°	3447.4	3408.3	1845.2	333.0	282.0	246.8	223.3	184.1	148.8	129.3	125.4
40°	3878.4	3760.9	1551.4	293.8	246.8	203.7	172.4	133.2	105.8	94.0	94.0
42.5°	4379.9	4101.7	1234.1	266.4	219.4	168.5	125.4	90.1	74.5	70.5	70.5
45°	4912.6	4419.0	916.7	246.8	192.0	133.2	90.1	62.7	54.8	50.9	50.9
47.5°	5461.1	4677.6	638.5	223.3	160.6	101.9	62.7	47.1	39.2	35.3	35.3
50°	5974.3	4846.0	450.5	199.8	137.1	74.5	47.1	35.3	27.4	27.4	27.4
52.5°	6330.8	4830.4	325.2	172.4	105.8	50.9	31.3	23.5	23.5	23.5	23.5
55°	6644.3	4771.7	254.6	148.8	82.2	35.3	23.5	19.5	19.5	15.7	15.7
57.5°	6910.6	4677.6	215.4	121.4	58.7	27.4	15.7	15.7	11.8	11.8	11.8
60°	7137.8	4560.1	180.2	101.9	39.2	19.5	11.8	7.9	7.9	3.9	7.9
62.5°	7447.4	4485.6	156.7	78.4	27.4	11.8	7.9	3.9	3.9	0.0	0.0
65°	7674.6	4344.6	133.2	54.8	15.7	7.9	3.9	3.9	0.0	0.0	0.0
67.5°	7682.4	4090.0	97.9	31.3	11.8	7.9	3.9	0.0	0.0	0.0	0.0
70°	7063.4	3486.6	62.7	15.7	7.9	3.9	3.9	0.0	0.0	0.0	0.0
71°	6495.3	3087.1	50.9	11.8	7.9	3.9	0.0	0.0	0.0	0.0	0.0
72.5°	5351.5	2268.3	39.2	11.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0
75°	2950.0	822.7	19.5	7.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	944.2	250.7	11.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	160.6	39.2	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	54.8	15.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.7	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	3.9	0.0	0.0	0.0	0.0	0.0	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)