

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: P237210

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237210
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-AF72-170-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA 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: 16419.4 lumens
Efficiency: N/A
Efficacy: 94.9 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): 173
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

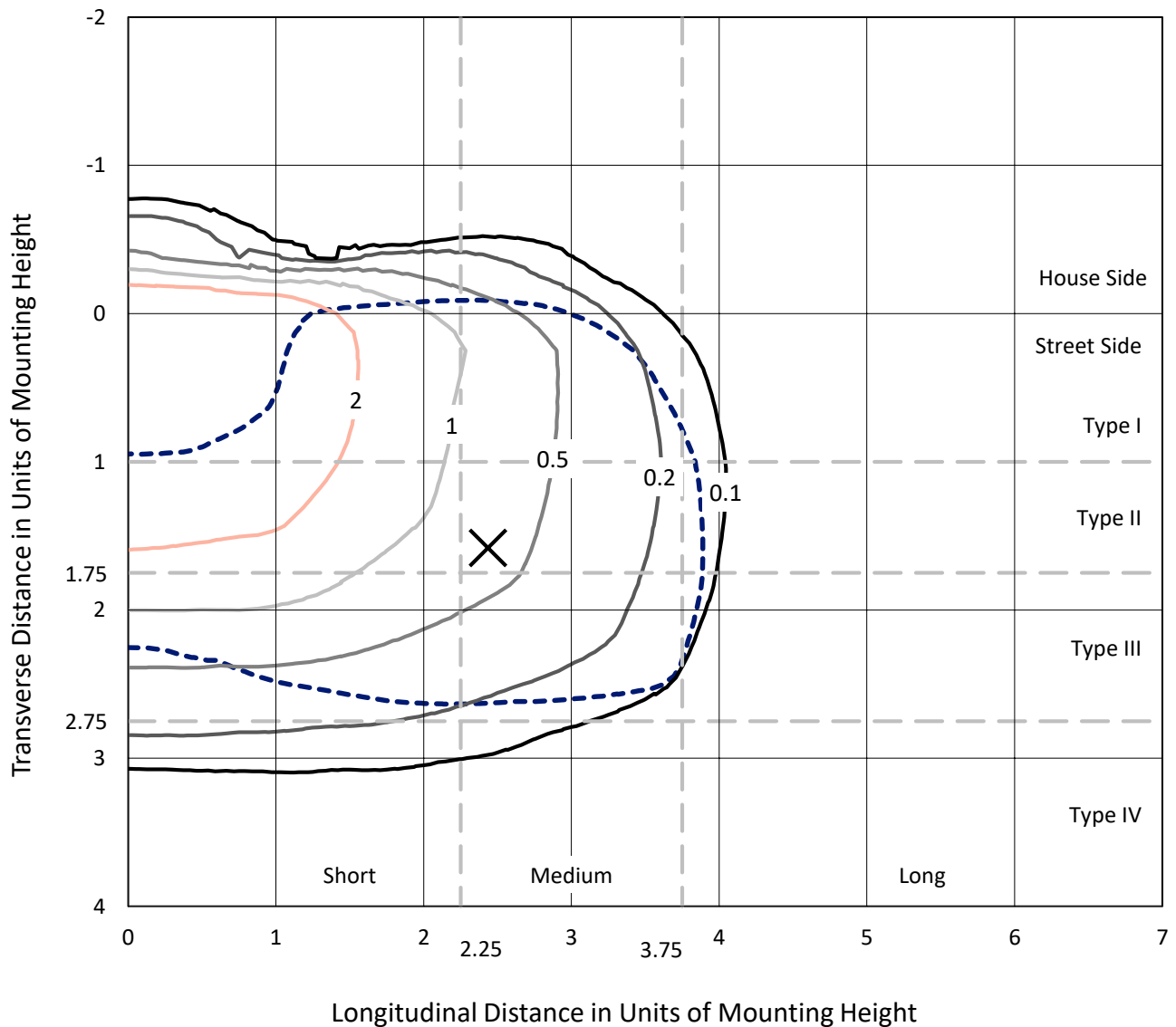


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

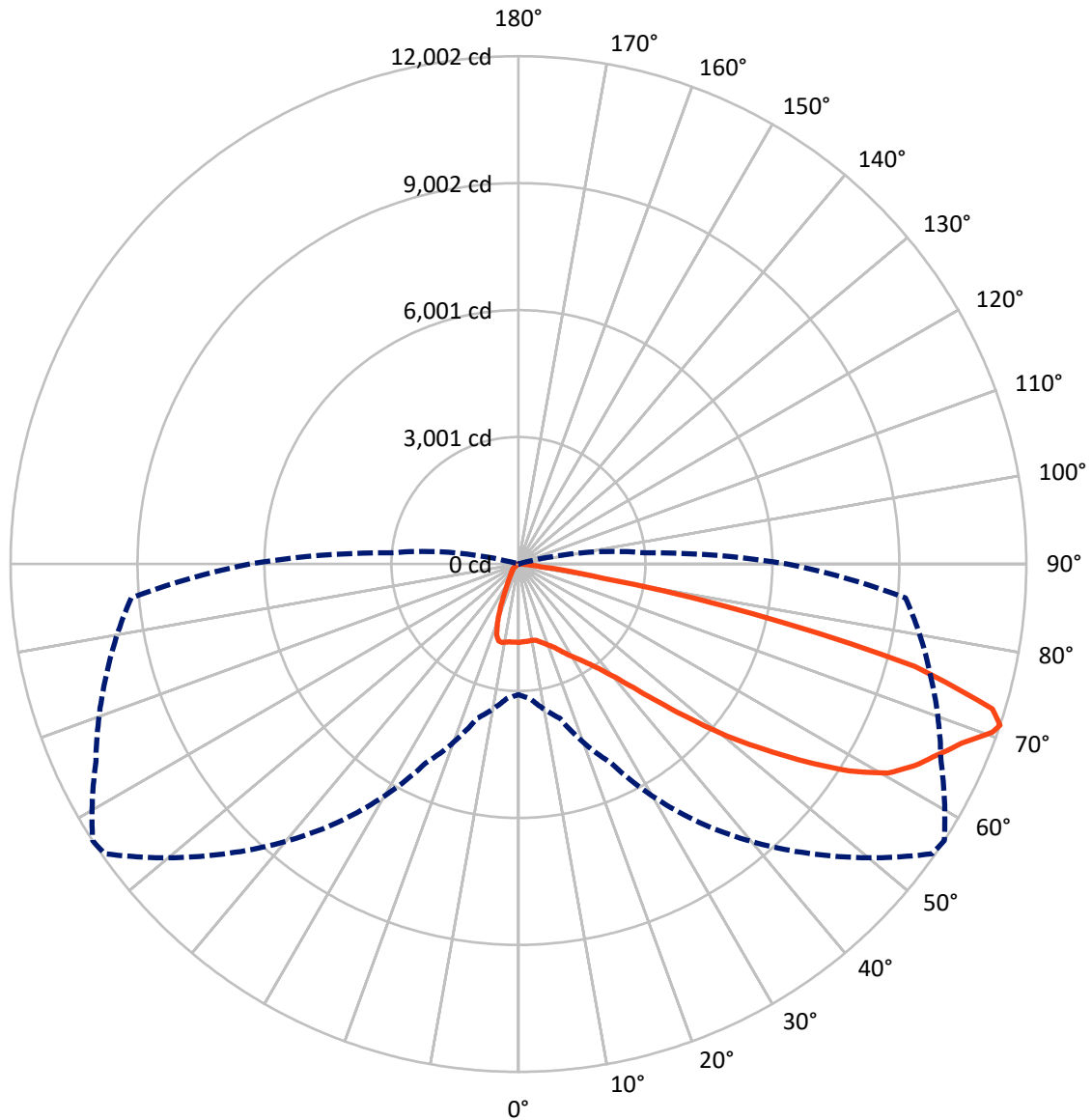


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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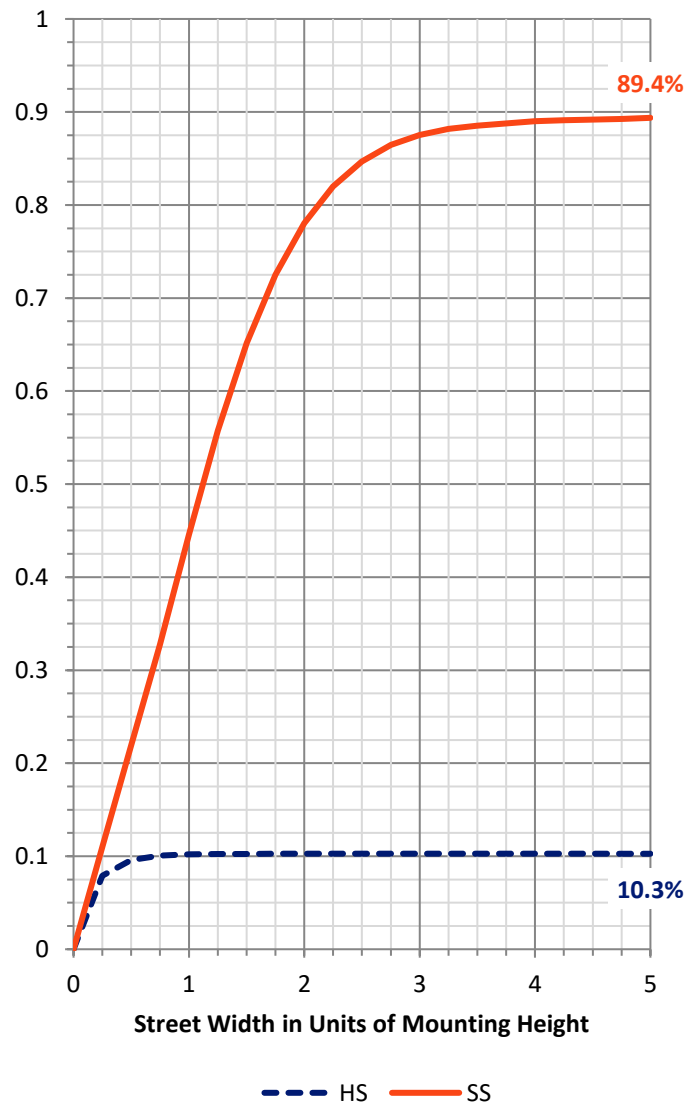
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1701.6	0.0	1701.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	14717.8	0.0	14717.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	16419.4	0.0	16419.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.3	1.1
10°-20°	465.9	2.8
20°-30°	726.9	4.4
30°-40°	1228.6	7.5
40°-50°	2386.2	14.5
50°-60°	4007.1	24.4
60°-70°	4782.1	29.1
70°-80°	2520.2	15.3
80°-90°	128.1	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°	16419.4	100.0
0°-180°	16419.4	100.0

Coefficient of Utilization



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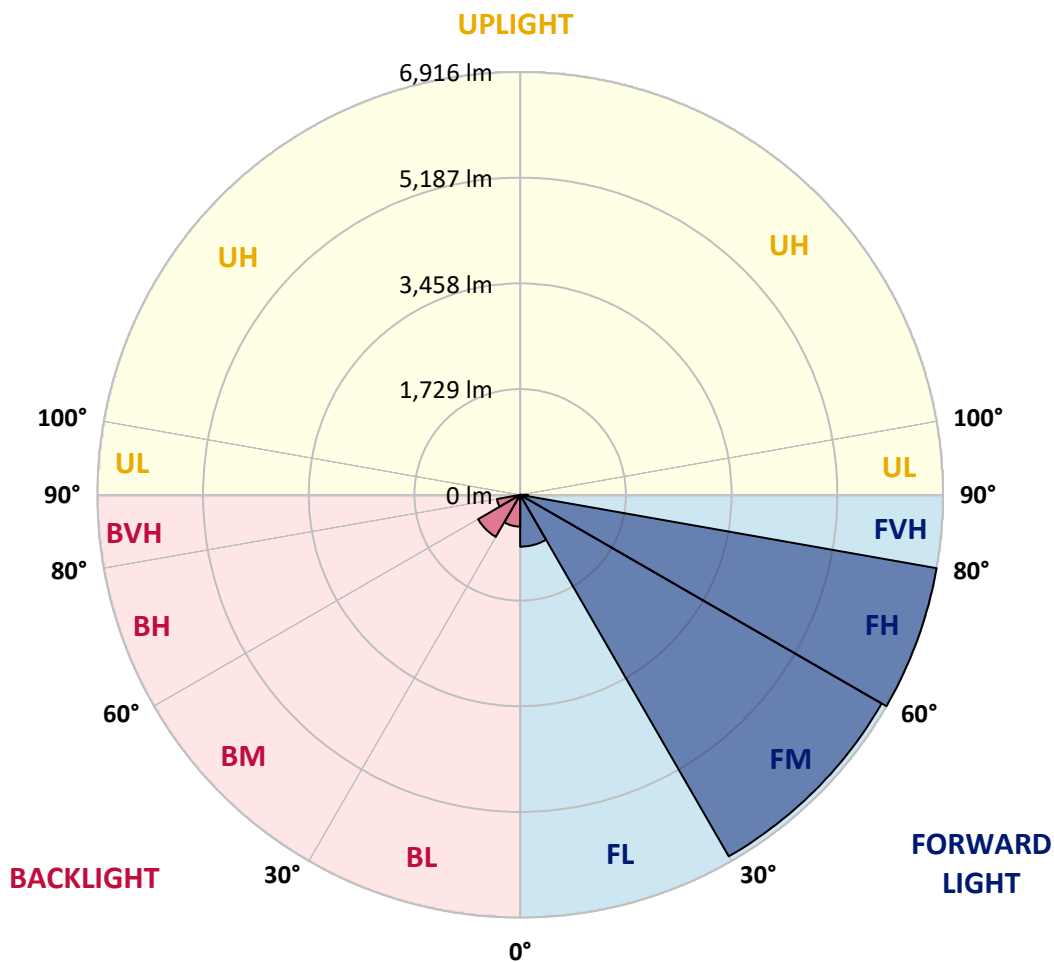
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	847.7	5.2			
FM	(30°-60°)	6827.3	41.6			
FH	(60°-80°)	6916.0	42.1			G3/7500
FVH	(80°-90°)	126.8	0.8			G2/225
BL	(0°-30°)	519.4	3.2	B2/1000		
BM	(30°-60°)	794.5	4.8	B1/1000		
BH	(60°-80°)	386.4	2.4	B1/500		G1/500
BVH	(80°-90°)	1.2	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°	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6
2.5°	1828.8	1828.8	1828.8	1832.7	1836.5	1836.5	1844.2	1840.3	1840.3	1840.3	1848.0
5°	1779.1	1782.9	1786.8	1794.5	1809.7	1821.2	1840.3	1840.3	1844.2	1851.8	1855.6
7.5°	1710.3	1714.1	1725.5	1740.9	1771.4	1798.2	1828.8	1836.5	1848.0	1867.1	1874.8
10°	1668.1	1675.8	1691.1	1710.3	1744.6	1779.1	1817.4	1828.8	1863.3	1897.7	1916.8
12.5°	1656.7	1660.6	1675.8	1706.4	1748.5	1790.6	1840.3	1851.8	1901.6	1955.2	1985.8
15°	1675.8	1679.7	1687.3	1721.7	1771.4	1825.0	1890.1	1905.3	1966.6	2027.8	2066.1
17.5°	1710.3	1710.3	1717.9	1748.5	1802.0	1863.3	1947.5	1970.4	2039.3	2108.2	2150.2
20°	1733.2	1733.2	1744.6	1775.3	1836.5	1916.8	2016.3	2046.9	2123.4	2200.0	2238.2
22.5°	1756.2	1760.0	1771.4	1805.9	1874.8	1985.8	2100.5	2131.1	2219.1	2299.5	2337.7
25°	1821.2	1817.4	1821.2	1851.8	1932.1	2069.9	2215.3	2253.6	2345.4	2433.4	2452.5
27.5°	2001.0	1993.4	1943.6	1924.5	1985.8	2157.9	2360.7	2398.9	2506.0	2594.1	2594.1
30°	2414.3	2398.9	2276.5	2119.7	2069.9	2238.2	2498.5	2552.0	2689.7	2766.3	2743.2
32.5°	2938.4	2904.0	2747.1	2479.3	2280.4	2345.4	2643.8	2705.0	2881.0	2946.1	2896.3
35°	3512.3	3508.5	3313.3	2969.0	2685.9	2567.3	2831.3	2904.0	3125.9	3183.3	3102.9
37.5°	4120.7	4136.0	4005.9	3531.4	3198.6	2930.8	3080.0	3164.2	3435.8	3504.6	3428.1
40°	4797.8	4794.1	4744.3	4181.9	3814.6	3447.2	3439.7	3516.2	3845.2	3952.3	3845.2
42.5°	5654.9	5647.3	5467.5	4962.4	4560.6	4120.7	3963.8	3990.5	4357.9	4533.9	4377.0
45°	6527.2	6473.7	6267.1	5830.9	5475.1	4954.8	4656.3	4656.3	4970.0	5211.1	4966.2
47.5°	7013.1	6959.6	6875.5	6634.3	6527.2	5945.7	5505.7	5452.1	5697.0	5941.9	5597.5
50°	7652.1	7652.1	7441.7	7349.9	7533.5	7124.1	6443.1	6389.6	6508.1	6703.3	6251.8
52.5°	8157.1	8065.4	7916.1	7996.5	8520.7	8333.2	7380.5	7277.2	7369.0	7418.7	6821.9
55°	8367.6	8279.6	8268.1	8562.7	9373.8	9113.7	8340.8	8249.0	8241.3	7996.5	7319.2
57.5°	8409.7	8333.2	8478.5	8995.1	10204.1	9752.6	9297.3	9228.4	9014.2	8402.0	7828.1
60°	8053.9	8092.2	8444.2	9232.2	10693.8	10307.5	10104.6	10032.0	9538.4	8746.3	8394.3
62.5°	7323.1	7414.9	8073.0	9255.2	10514.0	10533.1	10552.2	10502.5	9943.9	9060.1	8964.4
65°	6458.4	6485.2	7277.2	8937.7	10200.3	10464.3	10881.3	10877.4	10253.9	9412.1	9607.2
67.5°	5322.0	5367.9	6052.8	7866.4	9572.8	10433.7	11313.6	11302.2	10605.9	9813.9	9989.8
70°	3959.9	4017.3	4572.2	6117.9	8172.5	10051.1	11879.9	11887.6	10977.0	10120.0	9725.8
71°	3087.7	3190.9	3772.5	5195.8	7457.0	9664.6	11933.4	12002.4	11019.0	10077.8	9182.5
72.5°	1515.1	1637.5	2368.3	3657.7	6137.0	8799.9	11581.4	11715.4	10755.1	9553.6	7851.0
75°	394.0	417.1	707.8	1496.0	3290.4	5830.9	9339.4	9680.0	8792.3	7273.4	4797.8
77.5°	248.7	256.4	332.9	581.5	1232.0	2215.3	5486.6	5654.9	5023.6	3684.5	1691.1
80°	176.0	179.8	210.4	374.9	719.3	646.6	1974.3	2046.9	1817.4	975.7	302.3
82.5°	107.1	107.1	153.0	241.0	443.9	352.0	520.4	554.7	489.7	271.7	99.4
85°	61.2	65.1	95.6	164.5	210.4	172.2	195.2	206.6	210.4	179.8	42.0
87.5°	49.7	53.6	84.2	137.7	114.8	84.2	84.2	88.0	91.9	107.1	19.1
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°	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6	1855.6
2.5°	1848.0	1848.0	1851.8	1848.0	1848.0	1848.0	1851.8	1851.8	1851.8	1859.4	1863.3
5°	1855.6	1855.6	1855.6	1851.8	1848.0	1848.0	1855.6	1859.4	1859.4	1871.0	1871.0
7.5°	1874.8	1874.8	1867.1	1859.4	1851.8	1840.3	1844.2	1848.0	1844.2	1848.0	1848.0
10°	1916.8	1916.8	1905.3	1890.1	1867.1	1832.7	1786.8	1729.4	1675.8	1656.7	1649.0
12.5°	1985.8	1981.9	1959.0	1932.1	1882.4	1763.8	1591.6	1388.9	1220.5	1174.6	1159.3
15°	2062.3	2054.6	2027.8	1981.9	1848.0	1534.2	1174.6	914.4	753.7	715.5	707.8
17.5°	2142.6	2131.1	2092.9	2001.0	1691.1	1140.2	757.6	573.9	485.9	478.2	482.1
20°	2226.8	2211.4	2157.9	1962.7	1365.9	761.4	489.7	443.9	436.2	436.2	440.0
22.5°	2322.4	2303.3	2230.5	1825.0	994.8	505.0	420.8	417.1	413.2	409.4	409.4
25°	2433.4	2410.4	2299.5	1576.4	684.9	413.2	401.7	390.3	382.6	374.9	371.1
27.5°	2567.3	2536.7	2353.0	1270.3	470.6	386.5	378.8	359.7	344.3	329.1	329.1
30°	2701.2	2662.9	2337.7	956.6	382.6	359.7	344.3	321.4	298.4	283.2	279.3
32.5°	2842.8	2804.5	2238.2	642.8	348.2	329.1	310.0	275.5	248.7	229.6	225.8
35°	3053.2	3022.6	2043.1	424.7	313.7	290.8	264.0	229.6	195.2	176.0	172.2
37.5°	3366.9	3328.7	1802.0	325.2	275.5	241.0	218.1	179.8	145.4	126.2	122.4
40°	3787.8	3673.0	1515.1	286.9	241.0	199.0	168.4	130.1	103.3	91.9	91.9
42.5°	4277.6	4005.9	1205.2	260.1	214.3	164.5	122.4	88.0	72.7	68.8	68.8
45°	4797.8	4315.8	895.3	241.0	187.5	130.1	88.0	61.2	53.6	49.7	49.7
47.5°	5333.6	4568.3	623.7	218.1	156.8	99.4	61.2	45.9	38.3	34.5	34.5
50°	5834.7	4732.9	440.0	195.2	133.9	72.7	45.9	34.5	26.8	26.8	26.8
52.5°	6182.9	4717.5	317.5	168.4	103.3	49.7	30.6	22.9	22.9	22.9	22.9
55°	6489.0	4660.2	248.7	145.4	80.3	34.5	22.9	19.1	19.1	15.3	15.3
57.5°	6749.1	4568.3	210.4	118.6	57.4	26.8	15.3	15.3	11.5	11.5	11.5
60°	6971.1	4453.5	176.0	99.4	38.3	19.1	11.5	7.7	7.7	3.8	7.7
62.5°	7273.4	4380.9	153.0	76.5	26.8	11.5	7.7	3.8	3.8	0.0	0.0
65°	7495.3	4243.1	130.1	53.6	15.3	7.7	3.8	3.8	0.0	0.0	0.0
67.5°	7502.9	3994.4	95.6	30.6	11.5	7.7	3.8	0.0	0.0	0.0	0.0
70°	6898.4	3405.2	61.2	15.3	7.7	3.8	3.8	0.0	0.0	0.0	0.0
71°	6343.6	3014.9	49.7	11.5	7.7	3.8	0.0	0.0	0.0	0.0	0.0
72.5°	5226.4	2215.3	38.3	11.5	3.8	3.8	0.0	0.0	0.0	0.0	0.0
75°	2881.0	803.4	19.1	7.7	3.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	922.1	244.9	11.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	156.8	38.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	53.6	15.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.3	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	3.8	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)