

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: P265631

Luminaire Tested: **ARCH-L-AF72-150-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265631
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-AF72-150-D-U-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 665mA 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: 12713.1 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 153
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

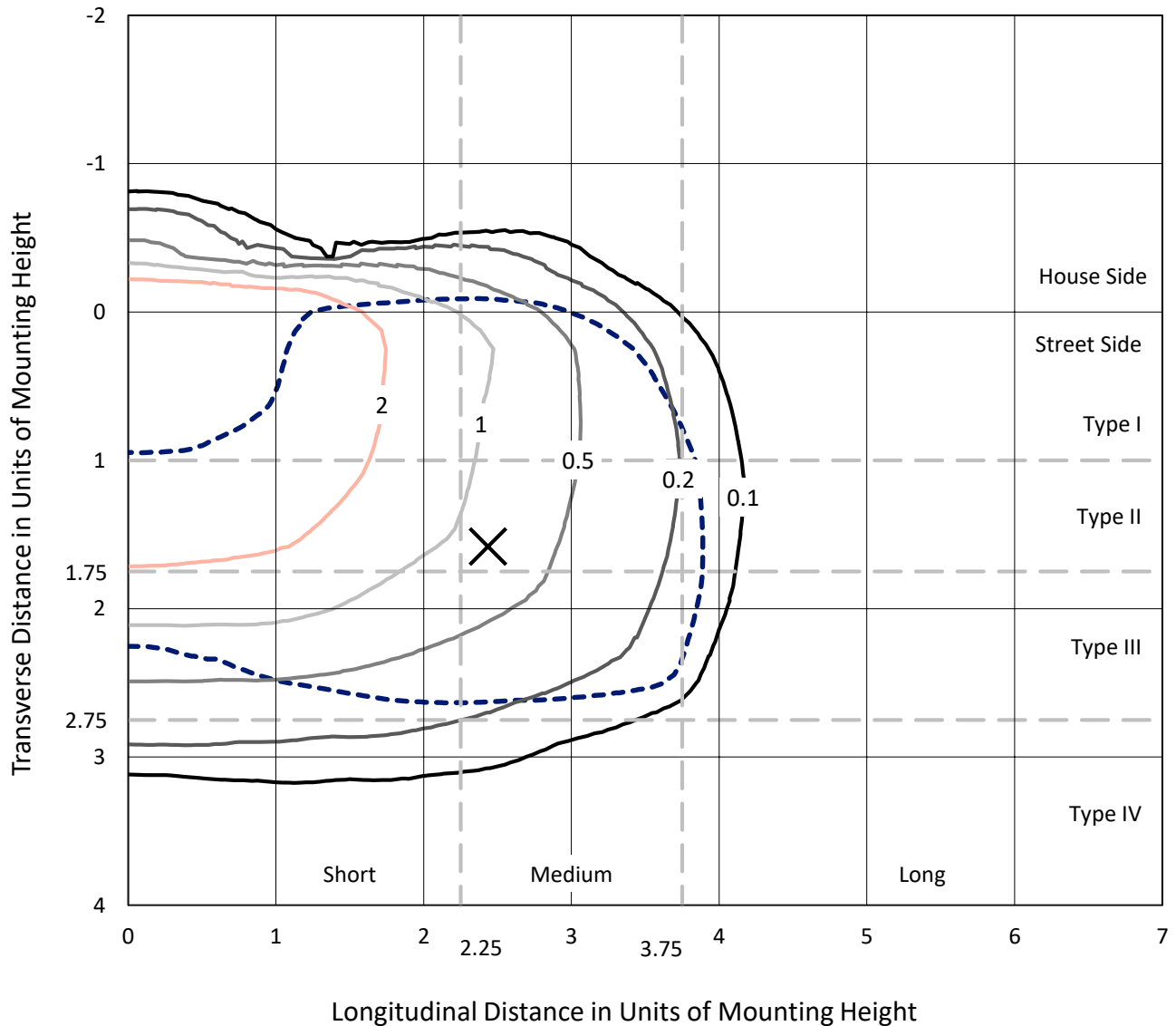


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

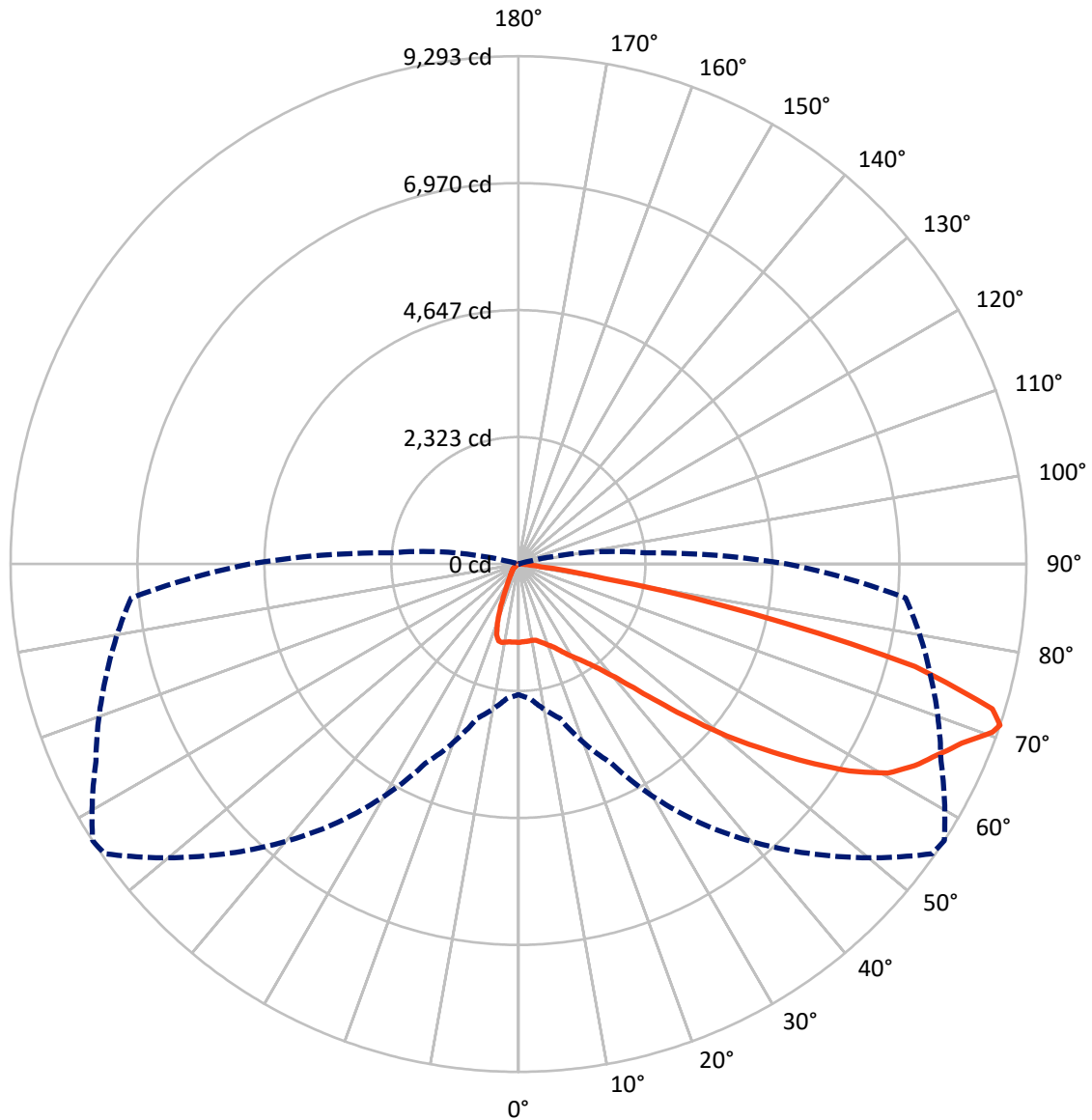


Based on 20 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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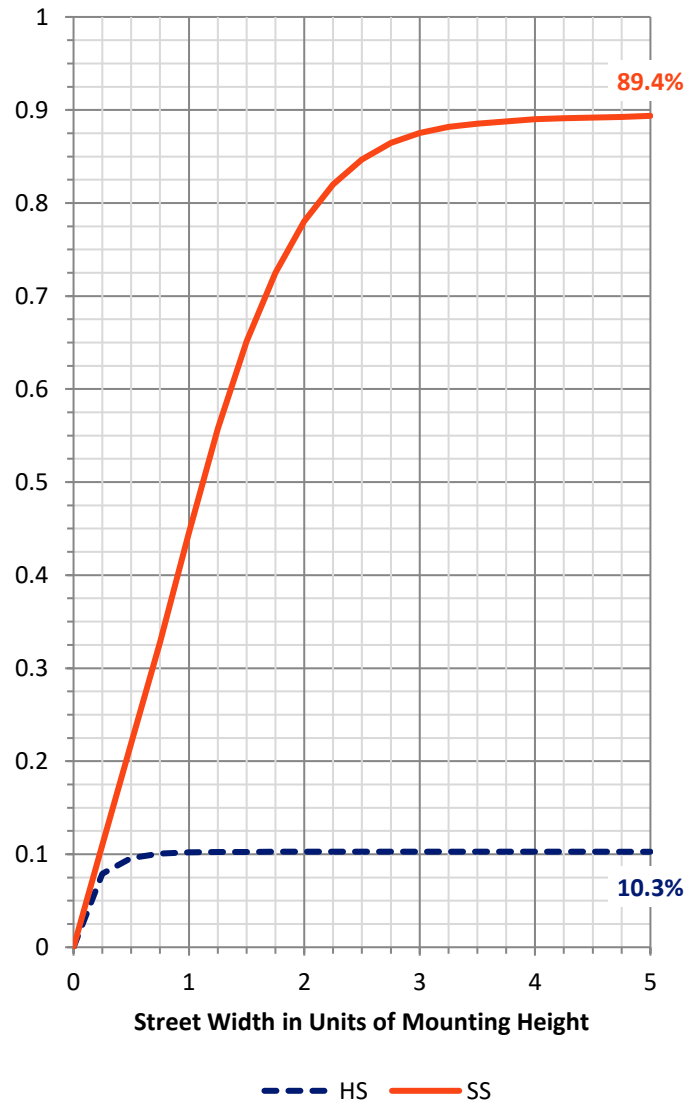
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1317.5	0.0	1317.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	11395.7	0.0	11395.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	12713.1	0.0	12713.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.9	1.1
10°-20°	360.8	2.8
20°-30°	562.8	4.4
30°-40°	951.2	7.5
40°-50°	1847.6	14.5
50°-60°	3102.6	24.4
60°-70°	3702.7	29.1
70°-80°	1951.4	15.3
80°-90°	99.2	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°	12713.1	100.0
0°-180°	12713.1	100.0



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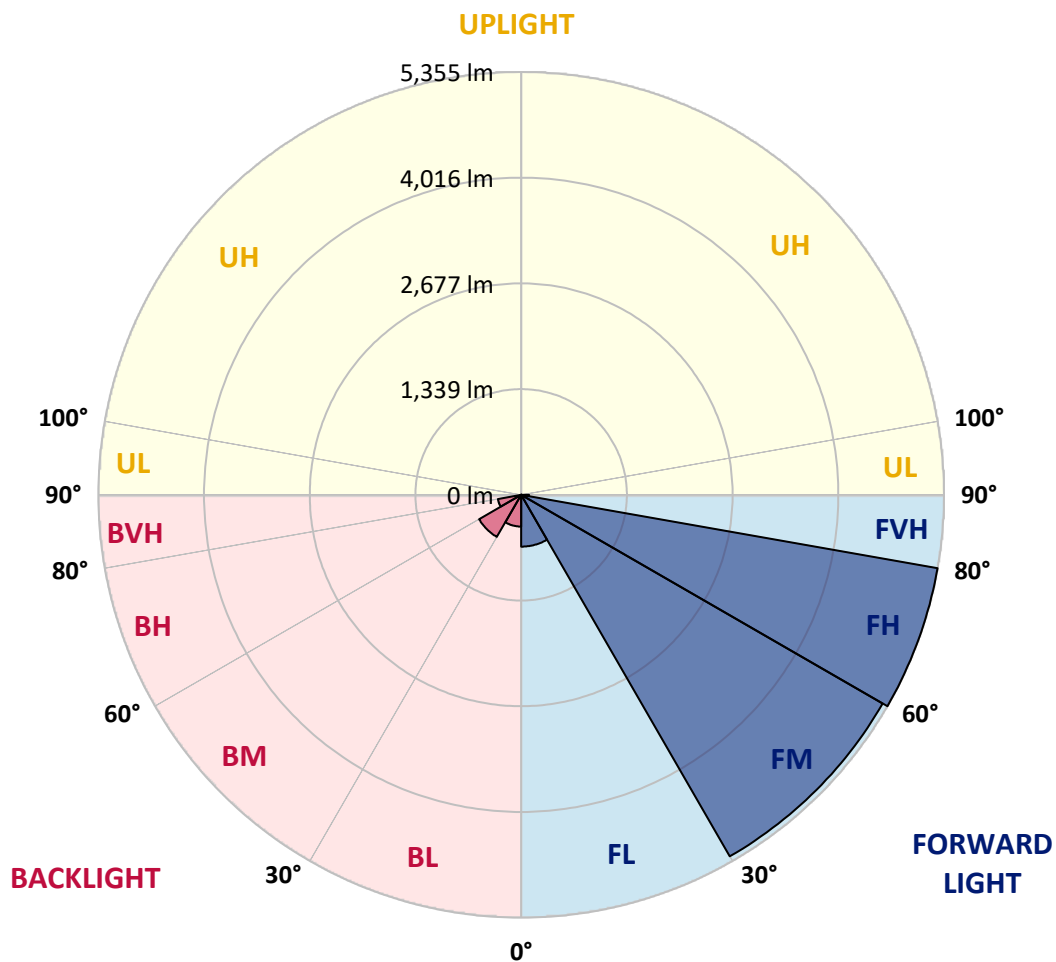
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	656.4	5.2			
FM	(30°-60°)	5286.2	41.6			
FH	(60°-80°)	5354.9	42.1			G3/7500
FVH	(80°-90°)	98.2	0.8			G1/100
BL	(0°-30°)	402.2	3.2	B1/500		
BM	(30°-60°)	615.2	4.8	B1/1000		
BH	(60°-80°)	299.2	2.4	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7
2.5°	1416.1	1416.1	1416.1	1419.1	1421.9	1421.9	1427.9	1424.9	1424.9	1424.9	1430.8
5°	1377.6	1380.4	1383.5	1389.4	1401.3	1410.1	1424.9	1424.9	1427.9	1433.9	1436.7
7.5°	1324.2	1327.2	1336.0	1347.8	1371.6	1392.4	1416.1	1421.9	1430.8	1445.6	1451.7
10°	1291.7	1297.5	1309.4	1324.2	1351.0	1377.6	1407.1	1416.1	1442.7	1469.4	1484.2
12.5°	1282.7	1285.7	1297.5	1321.2	1353.8	1386.4	1424.9	1433.9	1472.3	1513.9	1537.4
15°	1297.5	1300.4	1306.5	1333.1	1371.6	1413.0	1463.5	1475.2	1522.6	1570.1	1599.7
17.5°	1324.2	1324.2	1330.1	1353.8	1395.2	1442.7	1507.8	1525.6	1579.0	1632.3	1664.9
20°	1342.0	1342.0	1351.0	1374.5	1421.9	1484.2	1561.3	1584.9	1644.2	1703.4	1733.0
22.5°	1359.8	1362.6	1371.6	1398.2	1451.7	1537.4	1626.4	1650.0	1718.2	1780.4	1810.1
25°	1410.1	1407.1	1410.1	1433.9	1496.0	1602.7	1715.3	1744.9	1816.0	1884.1	1898.8
27.5°	1549.3	1543.4	1504.9	1490.1	1537.4	1670.8	1827.8	1857.4	1940.3	2008.5	2008.5
30°	1869.4	1857.4	1762.7	1641.2	1602.7	1733.0	1934.5	1975.9	2082.6	2141.7	2124.0
32.5°	2275.1	2248.5	2127.0	1919.7	1765.6	1816.0	2047.1	2094.5	2230.8	2281.1	2242.6
35°	2719.4	2716.6	2565.5	2298.9	2079.7	1987.8	2192.3	2248.5	2420.4	2464.7	2402.5
37.5°	3190.5	3202.4	3101.7	2734.4	2476.5	2269.2	2384.7	2449.9	2660.3	2713.6	2654.3
40°	3714.9	3711.9	3673.3	3237.9	2953.5	2669.1	2663.3	2722.5	2977.3	3060.2	2977.3
42.5°	4378.5	4372.5	4233.4	3842.3	3531.1	3190.5	3069.1	3089.8	3374.3	3510.4	3389.0
45°	5054.0	5012.5	4852.5	4514.7	4239.2	3836.3	3605.3	3605.3	3848.2	4034.8	3845.3
47.5°	5430.2	5388.7	5323.4	5136.9	5054.0	4603.6	4262.9	4221.4	4411.0	4600.7	4334.1
50°	5924.9	5924.9	5761.9	5690.9	5833.1	5516.0	4988.7	4947.2	5039.1	5190.1	4840.5
52.5°	6316.0	6244.7	6129.2	6191.5	6597.3	6452.2	5714.5	5634.4	5705.7	5744.1	5282.0
55°	6478.8	6410.7	6401.9	6629.9	7257.9	7056.5	6458.1	6386.9	6381.1	6191.5	5667.0
57.5°	6511.5	6452.2	6564.8	6964.6	7900.9	7551.2	7198.7	7145.4	6979.6	6505.4	6061.1
60°	6235.9	6265.5	6538.0	7148.4	8279.9	7980.8	7823.8	7767.5	7385.3	6772.1	6499.5
62.5°	5670.1	5741.2	6250.8	7166.0	8140.7	8155.5	8170.4	8131.8	7699.4	7015.0	6940.9
65°	5000.5	5021.3	5634.4	6920.3	7897.8	8102.3	8425.2	8422.1	7939.3	7287.6	7438.7
67.5°	4120.7	4156.3	4686.5	6090.8	7411.9	8078.5	8759.9	8751.0	8211.9	7598.7	7734.9
70°	3066.2	3110.6	3540.1	4736.9	6327.8	7782.2	9198.4	9204.3	8499.3	7835.6	7530.5
71°	2390.7	2470.7	2921.0	4023.0	5773.8	7483.2	9239.7	9293.1	8531.8	7803.0	7109.8
72.5°	1173.1	1267.9	1833.7	2832.0	4751.8	6813.6	8967.3	9070.9	8327.4	7397.2	6078.9
75°	305.2	322.9	548.1	1158.4	2547.8	4514.7	7231.3	7495.0	6807.6	5631.6	3714.9
77.5°	192.5	198.4	257.8	450.3	953.9	1715.3	4248.2	4378.5	3889.8	2852.7	1309.4
80°	136.3	139.2	163.0	290.3	556.9	500.6	1528.6	1584.9	1407.1	755.5	234.0
82.5°	83.0	83.0	118.4	186.7	343.6	272.5	402.9	429.6	379.2	210.4	77.1
85°	47.4	50.3	74.1	127.4	163.0	133.3	151.1	160.0	163.0	139.2	32.6
87.5°	38.4	41.5	65.1	106.7	88.8	65.1	65.1	68.1	71.1	83.0	14.8
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°	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7	1436.7
2.5°	1430.8	1430.8	1433.9	1430.8	1430.8	1430.8	1433.9	1433.9	1433.9	1439.8	1442.7
5°	1436.7	1436.7	1436.7	1433.9	1430.8	1430.8	1436.7	1439.8	1439.8	1448.6	1448.6
7.5°	1451.7	1451.7	1445.6	1439.8	1433.9	1424.9	1427.9	1430.8	1427.9	1430.8	1430.8
10°	1484.2	1484.2	1475.2	1463.5	1445.6	1419.1	1383.5	1339.1	1297.5	1282.7	1276.9
12.5°	1537.4	1534.6	1516.8	1496.0	1457.5	1365.7	1232.4	1075.5	944.9	909.4	897.6
15°	1596.7	1590.8	1570.1	1534.6	1430.8	1187.9	909.4	708.0	583.5	554.0	548.1
17.5°	1659.0	1650.0	1620.5	1549.3	1309.4	882.9	586.6	444.3	376.2	370.3	373.2
20°	1724.1	1712.3	1670.8	1519.8	1057.6	589.5	379.2	343.6	337.8	337.8	340.6
22.5°	1798.1	1783.3	1727.1	1413.0	770.2	391.0	325.8	322.9	319.9	317.0	317.0
25°	1884.1	1866.3	1780.4	1220.4	530.3	319.9	311.1	302.2	296.3	290.3	287.4
27.5°	1987.8	1964.1	1821.9	983.6	364.4	299.2	293.2	278.5	266.5	254.8	254.8
30°	2091.4	2061.9	1810.1	740.7	296.3	278.5	266.5	248.8	231.0	219.2	216.2
32.5°	2201.0	2171.5	1733.0	497.8	269.6	254.8	239.9	213.3	192.5	177.8	174.8
35°	2364.0	2340.4	1581.9	328.8	242.9	225.1	204.5	177.8	151.1	136.3	133.3
37.5°	2606.9	2577.2	1395.2	251.9	213.3	186.7	168.8	139.2	112.6	97.7	94.9
40°	2932.7	2843.9	1173.1	222.2	186.7	154.1	130.3	100.7	79.9	71.1	71.1
42.5°	3312.1	3101.7	933.2	201.4	165.8	127.4	94.9	68.1	56.2	53.3	53.3
45°	3714.9	3341.7	693.2	186.7	145.2	100.7	68.1	47.4	41.5	38.4	38.4
47.5°	4129.6	3537.2	482.8	168.8	121.5	77.1	47.4	35.6	29.6	26.7	26.7
50°	4517.7	3664.5	340.6	151.1	103.7	56.2	35.6	26.7	20.8	20.8	20.8
52.5°	4787.2	3652.7	245.9	130.3	79.9	38.4	23.6	17.7	17.7	17.7	17.7
55°	5024.3	3608.2	192.5	112.6	62.3	26.7	17.7	14.8	14.8	11.9	11.9
57.5°	5225.7	3537.2	163.0	91.8	44.5	20.8	11.9	11.9	9.0	9.0	9.0
60°	5397.6	3448.2	136.3	77.1	29.6	14.8	9.0	5.8	5.8	3.0	5.8
62.5°	5631.6	3392.0	118.4	59.3	20.8	9.0	5.8	3.0	3.0	0.0	0.0
65°	5803.4	3285.3	100.7	41.5	11.9	5.8	3.0	3.0	0.0	0.0	0.0
67.5°	5809.2	3092.8	74.1	23.6	9.0	5.8	3.0	0.0	0.0	0.0	0.0
70°	5341.2	2636.5	47.4	11.9	5.8	3.0	3.0	0.0	0.0	0.0	0.0
71°	4911.8	2334.3	38.4	9.0	5.8	3.0	0.0	0.0	0.0	0.0	0.0
72.5°	4046.7	1715.3	29.6	9.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
75°	2230.8	622.0	14.8	5.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	714.0	189.6	9.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	121.5	29.6	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.5	11.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.9	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	3.0	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)