

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: P237205

Luminaire Tested: **ARCH-L-AF72-120-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237205
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-AF72-120-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 530mA 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: 12390 lumens
Efficiency: N/A
Efficacy: 100.7 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

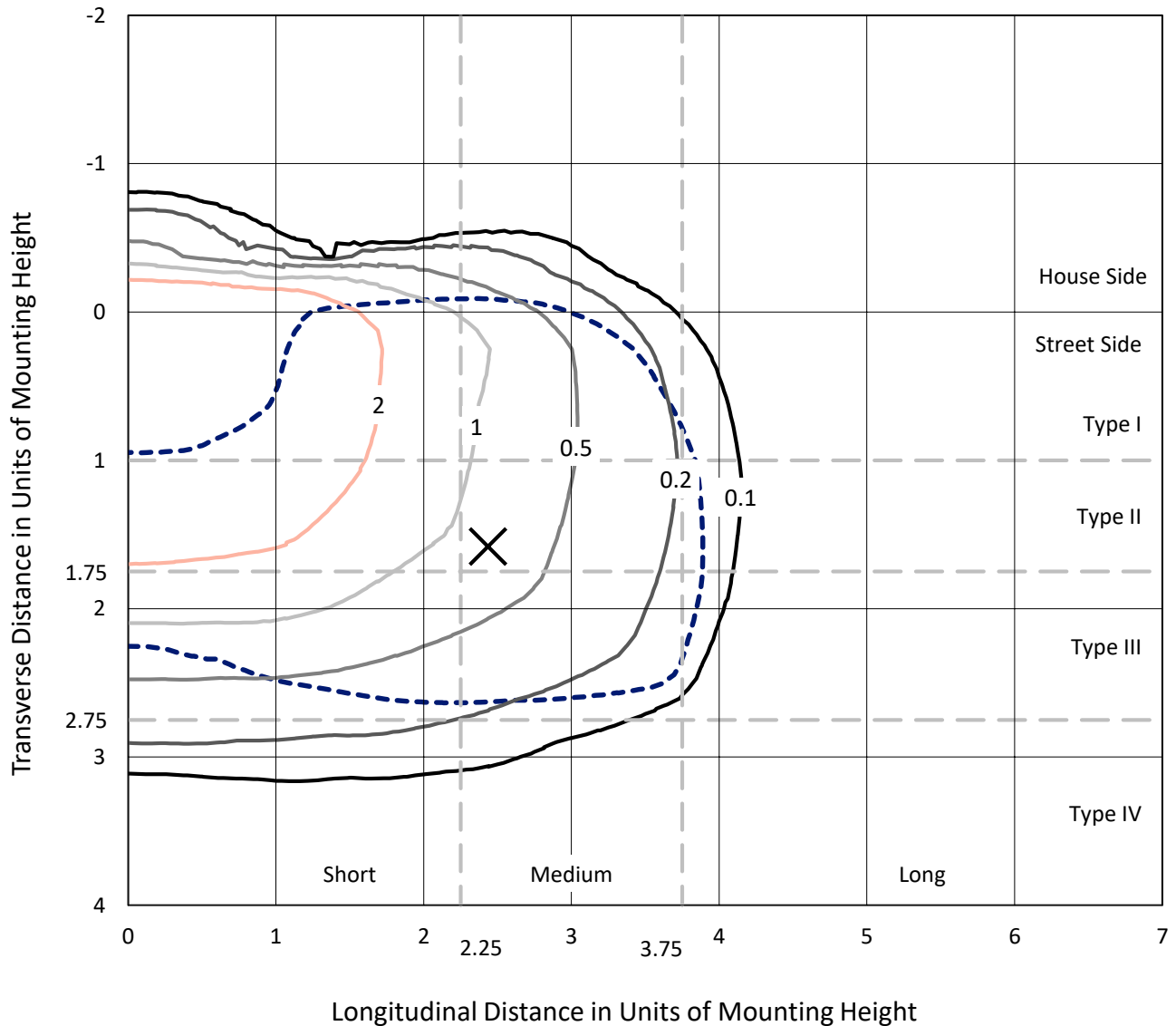
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

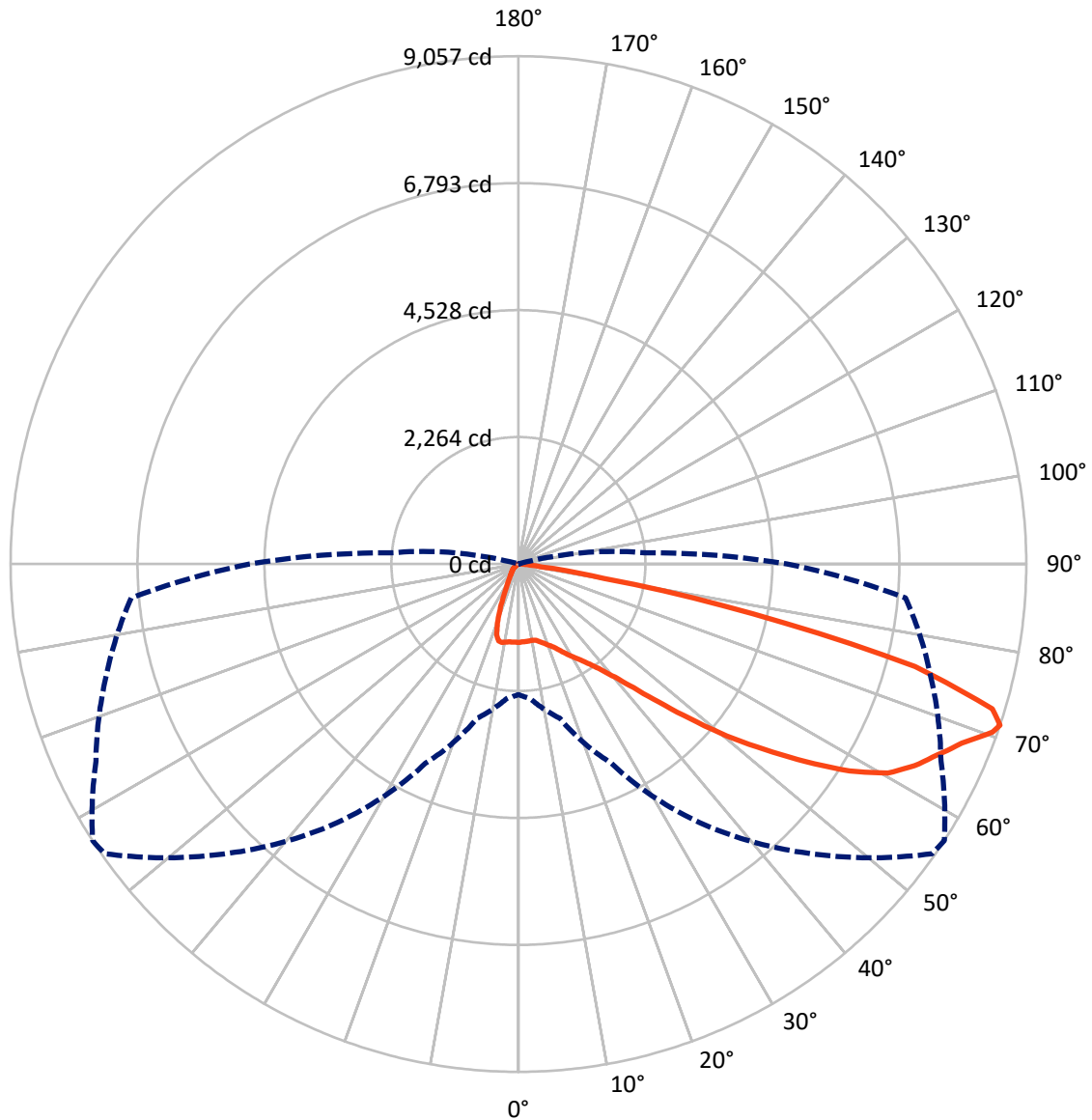


Based on 20 foot mounting height. Maximum calculated value = 4.4 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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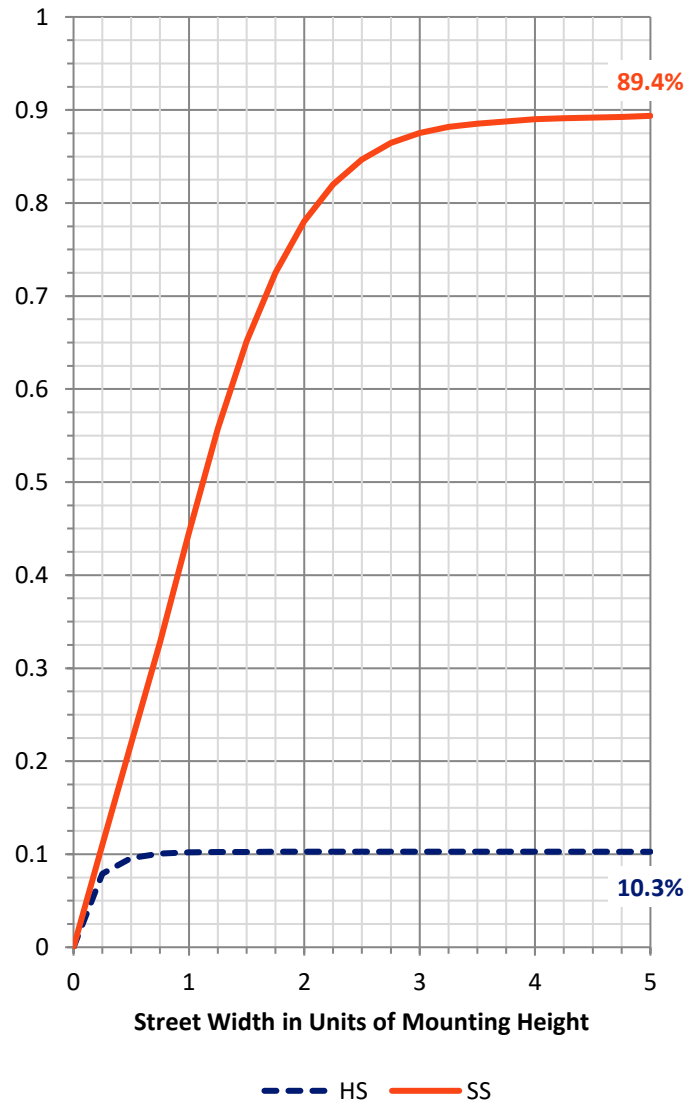
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1284.0	0.0	1284.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	11106.0	0.0	11106.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	12390.0	0.0	12390.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	1.1
10°-20°	351.6	2.8
20°-30°	548.5	4.4
30°-40°	927.1	7.5
40°-50°	1800.6	14.5
50°-60°	3023.8	24.4
60°-70°	3608.6	29.1
70°-80°	1901.7	15.3
80°-90°	96.6	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°	12390.0	100.0
0°-180°	12390.0	100.0



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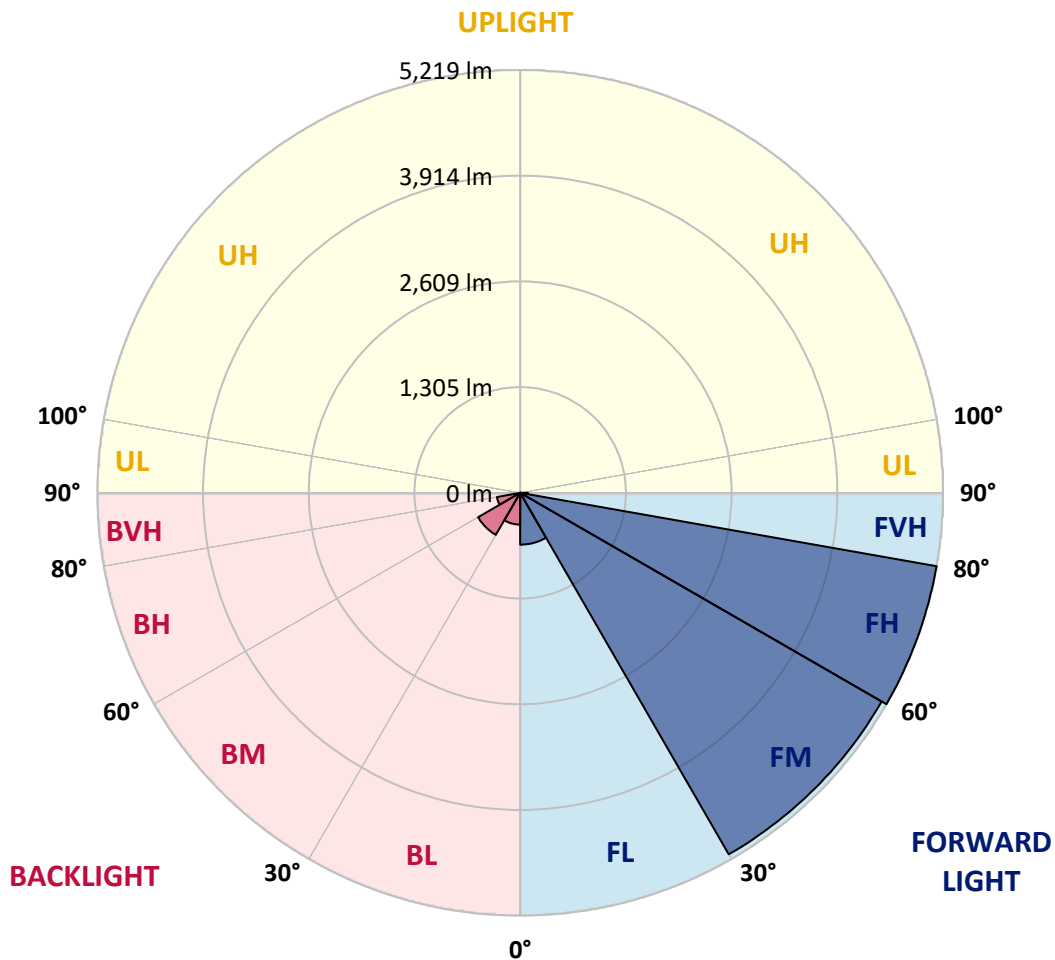
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	639.7	5.2			
FM	(30°-60°)	5151.9	41.6			
FH	(60°-80°)	5218.7	42.1			G3/7500
FVH	(80°-90°)	95.7	0.8			G1/100
BL	(0°-30°)	391.9	3.2	B1/500		
BM	(30°-60°)	599.6	4.8	B1/1000		
BH	(60°-80°)	291.6	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°	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2
2.5°	1380.1	1380.1	1380.1	1382.9	1385.8	1385.8	1391.6	1388.8	1388.8	1388.8	1394.5
5°	1342.5	1345.4	1348.2	1354.1	1365.6	1374.2	1388.8	1388.8	1391.6	1397.4	1400.2
7.5°	1290.6	1293.4	1302.1	1313.7	1336.7	1356.9	1380.1	1385.8	1394.5	1408.9	1414.7
10°	1258.7	1264.6	1276.1	1290.6	1316.5	1342.5	1371.4	1380.1	1406.0	1432.0	1446.5
12.5°	1250.1	1253.0	1264.6	1287.7	1319.4	1351.2	1388.8	1397.4	1434.9	1475.3	1498.4
15°	1264.6	1267.4	1273.3	1299.2	1336.7	1377.2	1426.2	1437.8	1484.0	1530.1	1559.1
17.5°	1290.6	1290.6	1296.3	1319.4	1359.8	1406.0	1469.6	1486.9	1538.8	1590.8	1622.6
20°	1307.8	1307.8	1316.5	1339.7	1385.8	1446.5	1521.5	1544.7	1602.4	1660.1	1689.0
22.5°	1325.2	1328.1	1336.7	1362.7	1414.7	1498.4	1585.1	1608.1	1674.6	1735.1	1764.1
25°	1374.2	1371.4	1374.2	1397.4	1458.0	1561.9	1671.6	1700.6	1769.8	1836.2	1850.6
27.5°	1510.0	1504.1	1466.7	1452.2	1498.4	1628.3	1781.4	1810.2	1891.0	1957.5	1957.5
30°	1821.8	1810.2	1717.8	1599.5	1561.9	1689.0	1885.3	1925.7	2029.6	2087.4	2070.0
32.5°	2217.3	2191.4	2072.9	1870.9	1720.7	1769.8	1995.0	2041.2	2174.0	2223.1	2185.5
35°	2650.4	2647.5	2500.3	2240.4	2026.8	1937.3	2136.4	2191.4	2358.8	2402.1	2341.4
37.5°	3109.5	3121.0	3022.8	2664.8	2413.7	2211.5	2324.1	2387.7	2592.7	2644.6	2586.8
40°	3620.4	3617.6	3580.0	3155.6	2878.5	2601.3	2595.5	2653.2	2901.6	2982.4	2901.6
42.5°	4267.1	4261.4	4125.7	3744.6	3441.4	3109.5	2991.1	3011.3	3288.5	3421.3	3302.9
45°	4925.4	4885.0	4729.1	4400.0	4131.5	3738.8	3513.6	3513.6	3750.3	3932.2	3747.5
47.5°	5292.1	5251.7	5188.2	5006.3	4925.4	4486.6	4154.6	4114.1	4299.0	4483.7	4223.9
50°	5774.3	5774.3	5615.5	5546.1	5684.7	5375.8	4861.9	4821.5	4911.0	5058.3	4717.5
52.5°	6155.3	6086.0	5973.4	6034.1	6429.7	6288.2	5569.3	5491.3	5560.6	5598.1	5147.7
55°	6314.2	6247.8	6239.1	6461.4	7073.5	6877.1	6293.9	6224.7	6218.8	6034.1	5523.1
57.5°	6345.9	6288.2	6397.8	6787.6	7700.0	7359.3	7015.7	6963.7	6802.1	6340.1	5907.0
60°	6077.4	6106.3	6371.9	6966.6	8069.5	7777.9	7624.9	7570.0	7197.6	6600.0	6334.3
62.5°	5526.0	5595.2	6091.9	6984.0	7933.8	7948.2	7962.6	7925.2	7503.7	6836.7	6764.6
65°	4873.4	4893.7	5491.3	6744.3	7697.1	7896.3	8211.0	8208.1	7737.5	7102.3	7249.6
67.5°	4016.0	4050.7	4567.5	5936.0	7223.6	7873.1	8537.2	8528.5	8003.2	7405.4	7538.3
70°	2988.1	3031.5	3450.1	4616.5	6166.9	7584.5	8964.5	8970.3	8283.1	7636.4	7339.1
71°	2329.9	2407.8	2846.7	3920.8	5627.0	7292.9	9004.9	9056.9	8315.0	7604.7	6929.1
72.5°	1143.4	1235.7	1787.1	2760.1	4630.9	6640.4	8739.4	8840.3	8115.7	7209.1	5924.4
75°	297.4	314.7	534.1	1128.8	2482.9	4400.0	7047.5	7304.4	6634.7	5488.4	3620.4
77.5°	187.7	193.4	251.1	438.8	929.7	1671.6	4140.1	4267.1	3790.7	2780.3	1276.1
80°	132.8	135.7	158.8	282.9	542.8	487.9	1489.7	1544.7	1371.4	736.2	228.1
82.5°	80.8	80.8	115.5	181.9	334.9	265.7	392.6	418.6	369.6	205.0	75.1
85°	46.2	49.1	72.2	124.2	158.8	129.9	147.2	155.9	158.8	135.7	31.7
87.5°	37.5	40.4	63.5	103.9	86.6	63.5	63.5	66.4	69.3	80.8	14.4
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°	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2	1400.2
2.5°	1394.5	1394.5	1397.4	1394.5	1394.5	1394.5	1397.4	1397.4	1397.4	1403.2	1406.0
5°	1400.2	1400.2	1400.2	1397.4	1394.5	1394.5	1400.2	1403.2	1403.2	1411.8	1411.8
7.5°	1414.7	1414.7	1408.9	1403.2	1397.4	1388.8	1391.6	1394.5	1391.6	1394.5	1394.5
10°	1446.5	1446.5	1437.8	1426.2	1408.9	1382.9	1348.2	1305.0	1264.6	1250.1	1244.3
12.5°	1498.4	1495.6	1478.2	1458.0	1420.5	1331.0	1201.0	1048.0	921.0	886.4	874.8
15°	1556.1	1550.4	1530.1	1495.6	1394.5	1157.8	886.4	690.0	568.8	539.9	534.1
17.5°	1616.8	1608.1	1579.2	1510.0	1276.1	860.4	571.6	433.1	366.6	360.9	363.8
20°	1680.3	1668.7	1628.3	1481.1	1030.7	574.5	369.6	334.9	329.1	329.1	332.0
22.5°	1752.5	1738.1	1683.2	1377.2	750.6	381.2	317.6	314.7	311.8	308.9	308.9
25°	1836.2	1818.9	1735.1	1189.5	516.8	311.8	303.1	294.5	288.7	282.9	280.1
27.5°	1937.3	1914.1	1775.5	958.5	355.1	291.6	285.8	271.4	259.8	248.3	248.3
30°	2038.3	2009.5	1764.1	721.8	288.7	271.4	259.8	242.5	225.2	213.7	210.7
32.5°	2145.1	2116.3	1689.0	485.1	262.7	248.3	233.8	207.9	187.7	173.2	170.3
35°	2303.9	2280.9	1541.7	320.5	236.7	219.4	199.2	173.2	147.2	132.8	129.9
37.5°	2540.7	2511.8	1359.8	245.4	207.9	181.9	164.6	135.7	109.7	95.2	92.4
40°	2858.2	2771.7	1143.4	216.6	181.9	150.2	127.1	98.2	77.9	69.3	69.3
42.5°	3227.8	3022.8	909.4	196.3	161.7	124.2	92.4	66.4	54.8	52.0	52.0
45°	3620.4	3256.7	675.6	181.9	141.5	98.2	66.4	46.2	40.4	37.5	37.5
47.5°	4024.7	3447.2	470.6	164.6	118.4	75.1	46.2	34.7	28.8	26.0	26.0
50°	4402.9	3571.3	332.0	147.2	101.1	54.8	34.7	26.0	20.3	20.3	20.3
52.5°	4665.6	3559.9	239.7	127.1	77.9	37.5	23.1	17.3	17.3	17.3	17.3
55°	4896.6	3516.5	187.7	109.7	60.7	26.0	17.3	14.4	14.4	11.6	11.6
57.5°	5092.9	3447.2	158.8	89.5	43.3	20.3	11.6	11.6	8.7	8.7	8.7
60°	5260.3	3360.6	132.8	75.1	28.8	14.4	8.7	5.7	5.7	2.9	5.7
62.5°	5488.4	3305.8	115.5	57.7	20.3	8.7	5.7	2.9	2.9	0.0	0.0
65°	5655.9	3201.8	98.2	40.4	11.6	5.7	2.9	2.9	0.0	0.0	0.0
67.5°	5661.6	3014.1	72.2	23.1	8.7	5.7	2.9	0.0	0.0	0.0	0.0
70°	5205.5	2569.6	46.2	11.6	5.7	2.9	2.9	0.0	0.0	0.0	0.0
71°	4786.9	2275.0	37.5	8.7	5.7	2.9	0.0	0.0	0.0	0.0	0.0
72.5°	3943.8	1671.6	28.8	8.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0
75°	2174.0	606.3	14.4	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	695.8	184.7	8.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	118.4	28.8	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.4	11.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	2.9	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)