

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: P237204

Luminaire Tested: **ARCH-L-AF72-110-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237204
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-AF72-110-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 485mA 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: 11495.9 lumens
Efficiency: N/A
Efficacy: 101.7 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 - G2

Input Watts (W): 113
Input Voltage (V): NR
Input Current (A_{in}): 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

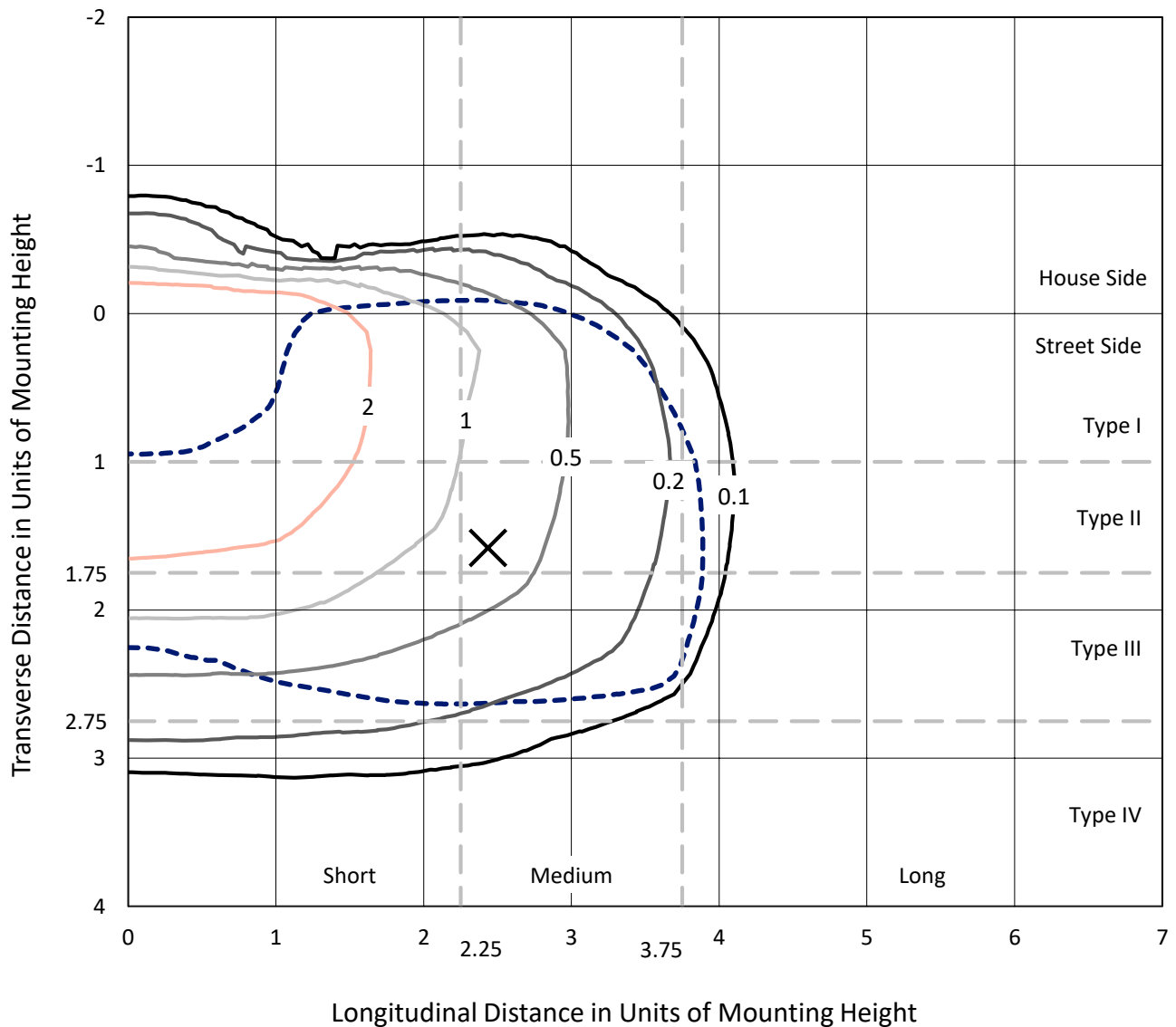


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

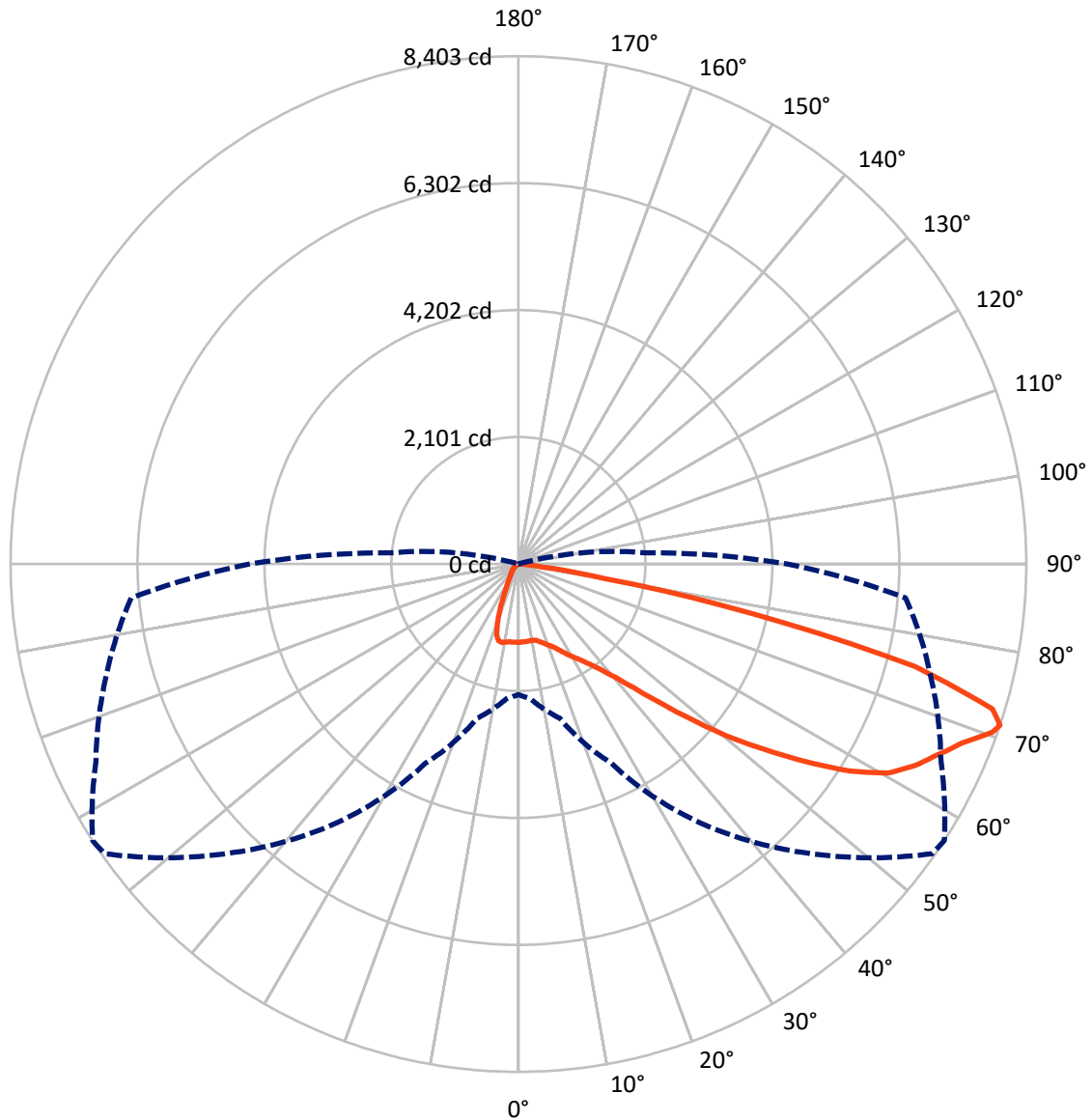


Based on 20 foot mounting height. Maximum calculated value = 4 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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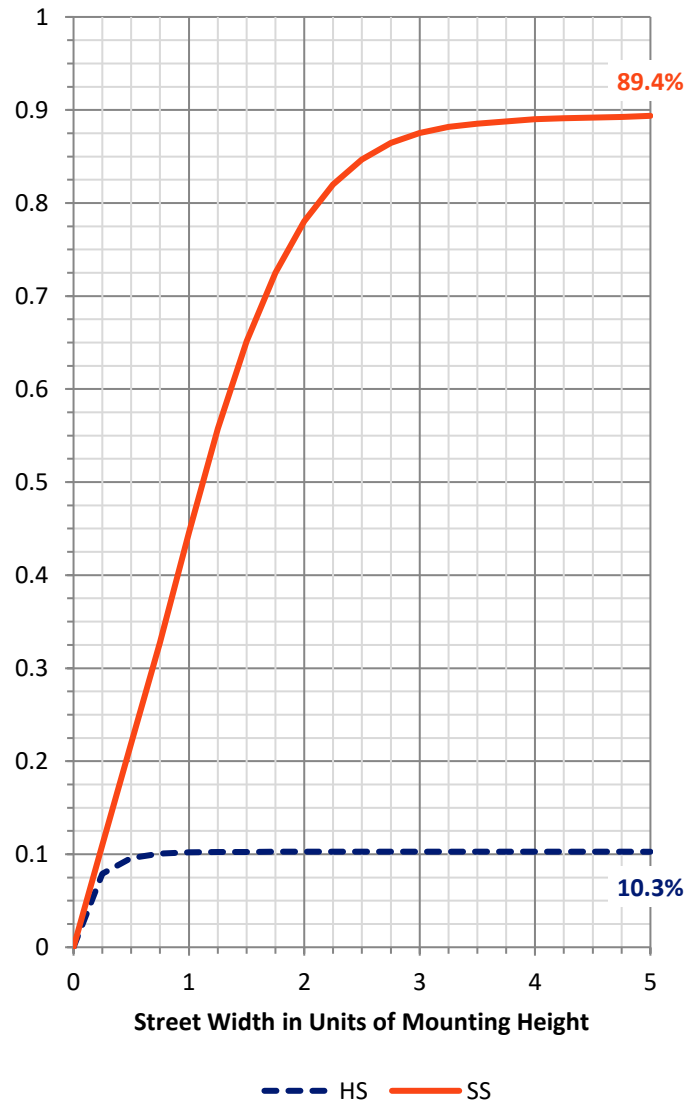
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1191.3	0.0	1191.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	10304.6	0.0	10304.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	11495.9	0.0	11495.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	1.1
10°-20°	326.2	2.8
20°-30°	508.9	4.4
30°-40°	860.2	7.5
40°-50°	1670.7	14.5
50°-60°	2805.6	24.4
60°-70°	3348.2	29.1
70°-80°	1764.5	15.3
80°-90°	89.7	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°	11495.9	100.0
0°-180°	11495.9	100.0

Coefficient of Utilization



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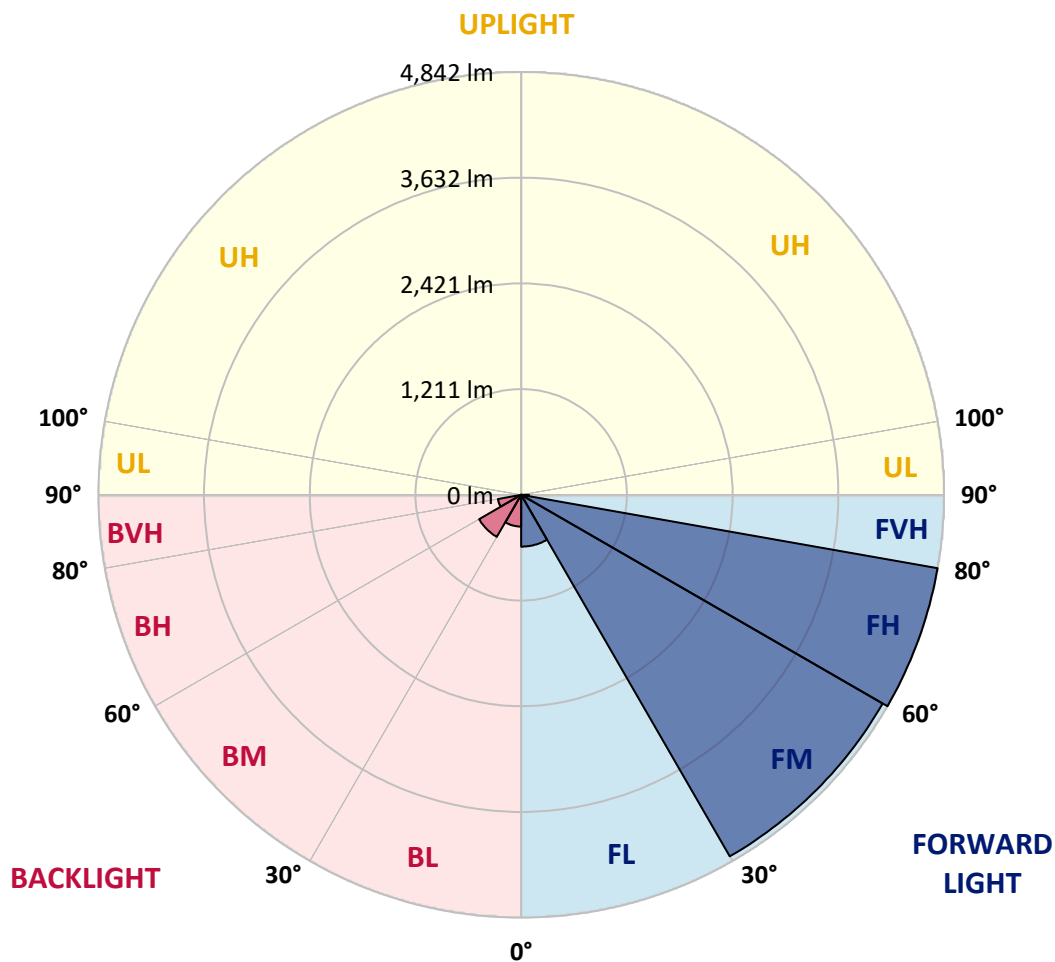
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	593.5	5.2			
FM	(30°-60°)	4780.1	41.6			
FH	(60°-80°)	4842.2	42.1			G2/5000
FVH	(80°-90°)	88.8	0.8			G1/100
BL	(0°-30°)	363.7	3.2	B1/500		
BM	(30°-60°)	556.3	4.8	B1/1000		
BH	(60°-80°)	270.5	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-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2
2.5°	1280.4	1280.4	1280.4	1283.2	1285.8	1285.8	1291.2	1288.5	1288.5	1288.5	1293.8
5°	1245.6	1248.3	1251.0	1256.4	1267.0	1275.1	1288.5	1288.5	1291.2	1296.5	1299.2
7.5°	1197.5	1200.1	1208.1	1218.8	1240.3	1259.0	1280.4	1285.8	1293.8	1307.2	1312.7
10°	1167.9	1173.3	1184.1	1197.5	1221.5	1245.6	1272.4	1280.4	1304.6	1328.7	1342.1
12.5°	1159.9	1162.6	1173.3	1194.7	1224.2	1253.6	1288.5	1296.5	1331.4	1368.9	1390.3
15°	1173.3	1176.0	1181.3	1205.4	1240.3	1277.8	1323.3	1334.0	1376.9	1419.8	1446.6
17.5°	1197.5	1197.5	1202.8	1224.2	1261.7	1304.6	1363.5	1379.6	1427.8	1476.0	1505.5
20°	1213.5	1213.5	1221.5	1243.0	1285.8	1342.1	1411.7	1433.2	1486.8	1540.3	1567.1
22.5°	1229.6	1232.2	1240.3	1264.4	1312.7	1390.3	1470.7	1492.1	1553.7	1609.9	1636.7
25°	1275.1	1272.4	1275.1	1296.5	1352.8	1449.2	1551.0	1577.8	1642.1	1703.7	1717.1
27.5°	1401.0	1395.6	1360.8	1347.4	1390.3	1510.8	1652.8	1679.6	1754.6	1816.2	1816.2
30°	1690.3	1679.6	1593.9	1484.1	1449.2	1567.1	1749.2	1786.8	1883.2	1936.8	1920.7
32.5°	2057.4	2033.2	1923.4	1735.8	1596.5	1642.1	1851.0	1893.9	2017.2	2062.7	2027.8
35°	2459.2	2456.4	2319.8	2078.7	1880.5	1797.4	1982.3	2033.2	2188.6	2228.7	2172.5
37.5°	2885.0	2895.8	2804.7	2472.6	2239.4	2051.9	2156.4	2215.4	2405.6	2453.8	2400.1
40°	3359.2	3356.5	3321.7	2927.9	2670.7	2413.6	2408.2	2461.8	2692.2	2767.2	2692.2
42.5°	3959.2	3953.9	3828.0	3474.4	3193.1	2885.0	2775.3	2794.0	3051.2	3174.3	3064.6
45°	4570.0	4532.5	4387.8	4082.5	3833.3	3469.0	3260.0	3260.0	3479.8	3648.6	3477.1
47.5°	4910.3	4872.7	4813.8	4645.0	4570.0	4162.8	3854.8	3817.2	3988.7	4160.1	3919.0
50°	5357.6	5357.6	5210.3	5146.0	5274.5	4987.9	4511.1	4473.6	4556.6	4693.2	4377.1
52.5°	5711.1	5646.9	5542.4	5598.7	5965.6	5834.4	5167.4	5095.0	5159.4	5194.1	4776.3
55°	5858.5	5796.9	5788.9	5995.1	6563.0	6380.9	5839.7	5775.5	5770.2	5598.7	5124.6
57.5°	5888.0	5834.4	5936.2	6297.8	7144.3	6828.2	6509.4	6461.3	6311.2	5882.6	5480.8
60°	5638.8	5665.6	5912.0	6463.9	7487.2	7216.6	7074.7	7023.8	6678.2	6123.7	5877.3
62.5°	5127.2	5191.5	5652.2	6480.0	7361.4	7374.8	7388.1	7353.3	6962.2	6343.4	6276.4
65°	4521.7	4540.6	5095.0	6257.7	7141.6	7326.5	7618.5	7615.8	7179.2	6589.8	6726.4
67.5°	3726.2	3758.3	4237.9	5507.6	6702.4	7305.1	7921.2	7913.1	7425.6	6871.1	6994.3
70°	2772.5	2812.7	3201.1	4283.4	5721.9	7037.2	8317.6	8323.0	7685.4	7085.4	6809.5
71°	2161.8	2234.1	2641.3	3637.8	5220.9	6766.6	8355.2	8403.3	7714.9	7055.9	6429.1
72.5°	1060.8	1146.5	1658.2	2561.0	4296.8	6161.2	8108.7	8202.4	7530.0	6689.0	5496.9
75°	275.9	292.0	495.6	1047.4	2303.8	4082.5	6538.9	6777.4	6155.8	5092.4	3359.2
77.5°	174.1	179.5	233.0	407.1	862.6	1551.0	3841.4	3959.2	3517.2	2579.7	1184.1
80°	123.3	125.9	147.3	262.5	503.6	452.8	1382.2	1433.2	1272.4	683.1	211.6
82.5°	75.0	75.0	107.1	168.8	310.8	246.4	364.3	388.4	342.9	190.2	69.7
85°	42.9	45.5	67.0	115.2	147.3	120.5	136.7	144.6	147.3	125.9	29.5
87.5°	34.8	37.5	58.9	96.5	80.4	58.9	58.9	61.6	64.2	75.0	13.4
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°	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2	1299.2
2.5°	1293.8	1293.8	1296.5	1293.8	1293.8	1293.8	1296.5	1296.5	1296.5	1301.9	1304.6
5°	1299.2	1299.2	1299.2	1296.5	1293.8	1293.8	1299.2	1301.9	1301.9	1309.9	1309.9
7.5°	1312.7	1312.7	1307.2	1301.9	1296.5	1288.5	1291.2	1293.8	1291.2	1293.8	1293.8
10°	1342.1	1342.1	1334.0	1323.3	1307.2	1283.2	1251.0	1210.8	1173.3	1159.9	1154.6
12.5°	1390.3	1387.6	1371.6	1352.8	1318.0	1234.9	1114.4	972.4	854.6	822.4	811.7
15°	1443.9	1438.5	1419.8	1387.6	1293.8	1074.2	822.4	640.3	527.7	500.9	495.6
17.5°	1500.2	1492.1	1465.3	1401.0	1184.1	798.3	530.4	401.8	340.2	334.8	337.6
20°	1559.1	1548.3	1510.8	1374.2	956.4	533.1	342.9	310.8	305.4	305.4	308.0
22.5°	1626.0	1612.7	1561.7	1277.8	696.5	353.6	294.7	292.0	289.3	286.6	286.6
25°	1703.7	1687.7	1609.9	1103.7	479.5	289.3	281.3	273.2	267.9	262.5	259.8
27.5°	1797.4	1776.0	1647.5	889.4	329.5	270.6	265.3	251.9	241.1	230.4	230.4
30°	1891.2	1864.4	1636.7	669.7	267.9	251.9	241.1	225.0	209.0	198.2	195.6
32.5°	1990.4	1963.6	1567.1	450.0	243.8	230.4	217.0	192.8	174.1	160.7	158.0
35°	2137.7	2116.3	1430.5	297.4	219.6	203.6	184.8	160.7	136.7	123.3	120.5
37.5°	2357.3	2330.6	1261.7	227.7	192.8	168.8	152.7	125.9	101.8	88.4	85.7
40°	2652.0	2571.6	1060.8	200.9	168.8	139.3	117.8	91.0	72.3	64.2	64.2
42.5°	2994.9	2804.7	843.8	182.2	150.0	115.2	85.7	61.6	50.9	48.2	48.2
45°	3359.2	3021.7	626.9	168.8	131.2	91.0	61.6	42.9	37.5	34.8	34.8
47.5°	3734.3	3198.5	436.6	152.7	109.9	69.7	42.9	32.1	26.8	24.1	24.1
50°	4085.2	3313.6	308.0	136.7	93.8	50.9	32.1	24.1	18.7	18.7	18.7
52.5°	4328.9	3302.9	222.4	117.8	72.3	34.8	21.4	16.1	16.1	16.1	16.1
55°	4543.2	3262.8	174.1	101.8	56.3	24.1	16.1	13.4	13.4	10.7	10.7
57.5°	4725.4	3198.5	147.3	83.1	40.2	18.7	10.7	10.7	8.1	8.1	8.1
60°	4880.8	3118.2	123.3	69.7	26.8	13.4	8.1	5.3	5.3	2.7	5.3
62.5°	5092.4	3067.2	107.1	53.6	18.7	8.1	5.3	2.7	2.7	0.0	0.0
65°	5247.7	2970.8	91.0	37.5	10.7	5.3	2.7	2.7	0.0	0.0	0.0
67.5°	5253.2	2796.6	67.0	21.4	8.1	5.3	2.7	0.0	0.0	0.0	0.0
70°	4829.9	2384.1	42.9	10.7	5.3	2.7	2.7	0.0	0.0	0.0	0.0
71°	4441.4	2110.9	34.8	8.1	5.3	2.7	0.0	0.0	0.0	0.0	0.0
72.5°	3659.2	1551.0	26.8	8.1	2.7	2.7	0.0	0.0	0.0	0.0	0.0
75°	2017.2	562.5	13.4	5.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	645.6	171.4	8.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	109.9	26.8	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.5	10.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.3	2.7	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)