

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: P265595

Luminaire Tested: **ARCH-L-AF72-110-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265595
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-T3-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 9763.8 lumens
Efficiency: N/A
Efficacy: 86.4 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 (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

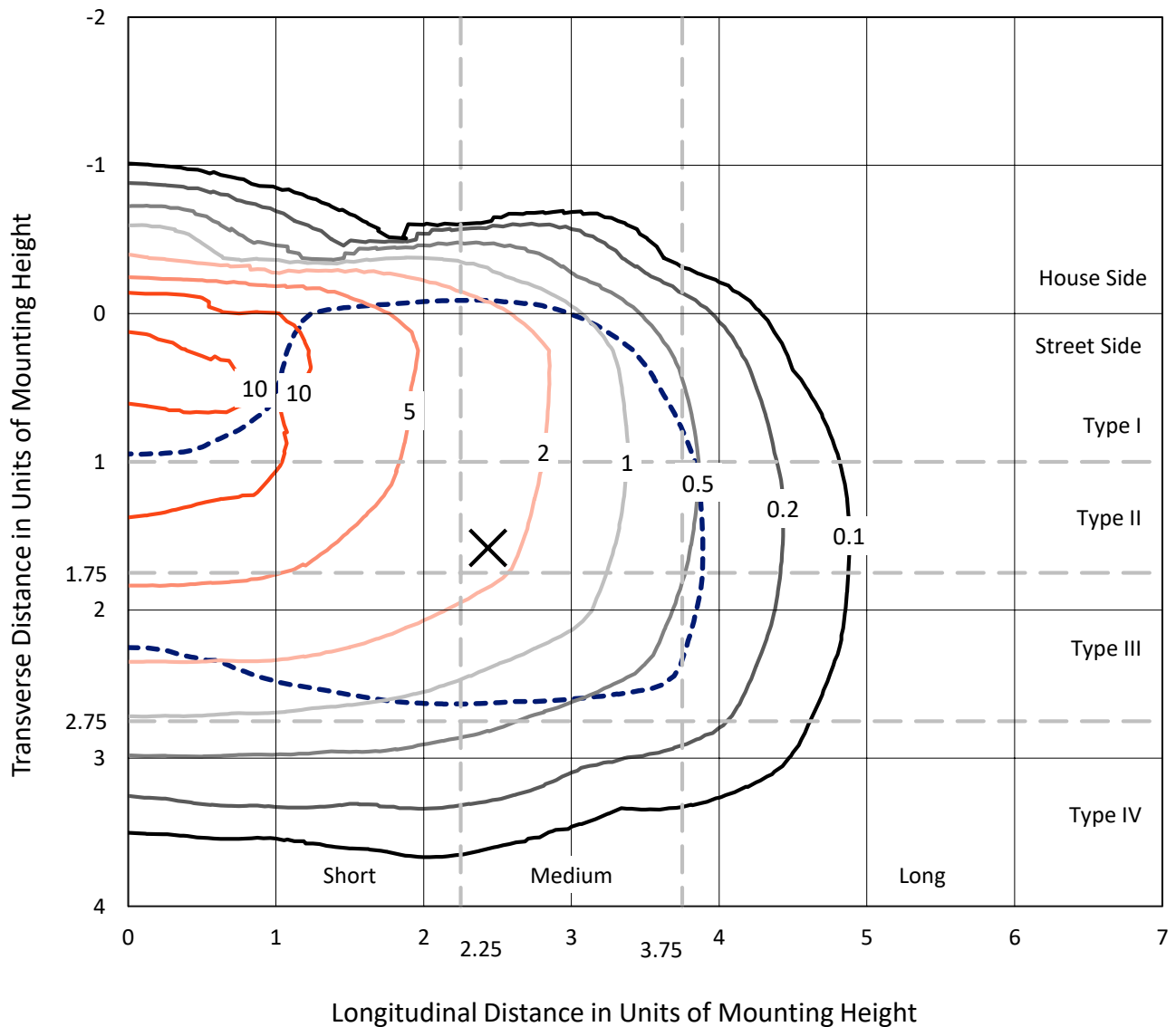


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

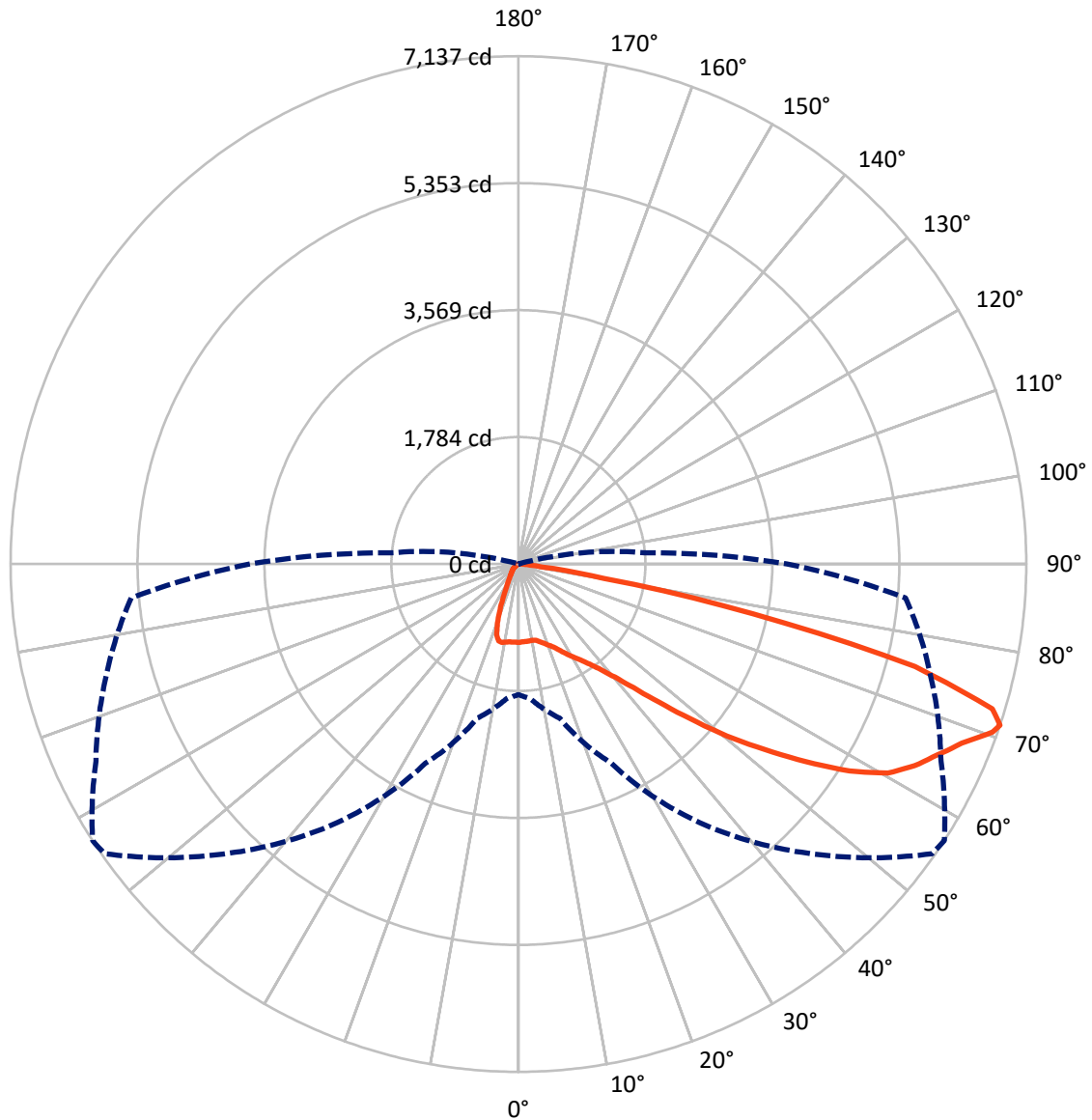


Based on 10 foot mounting height. Maximum calculated value = 13.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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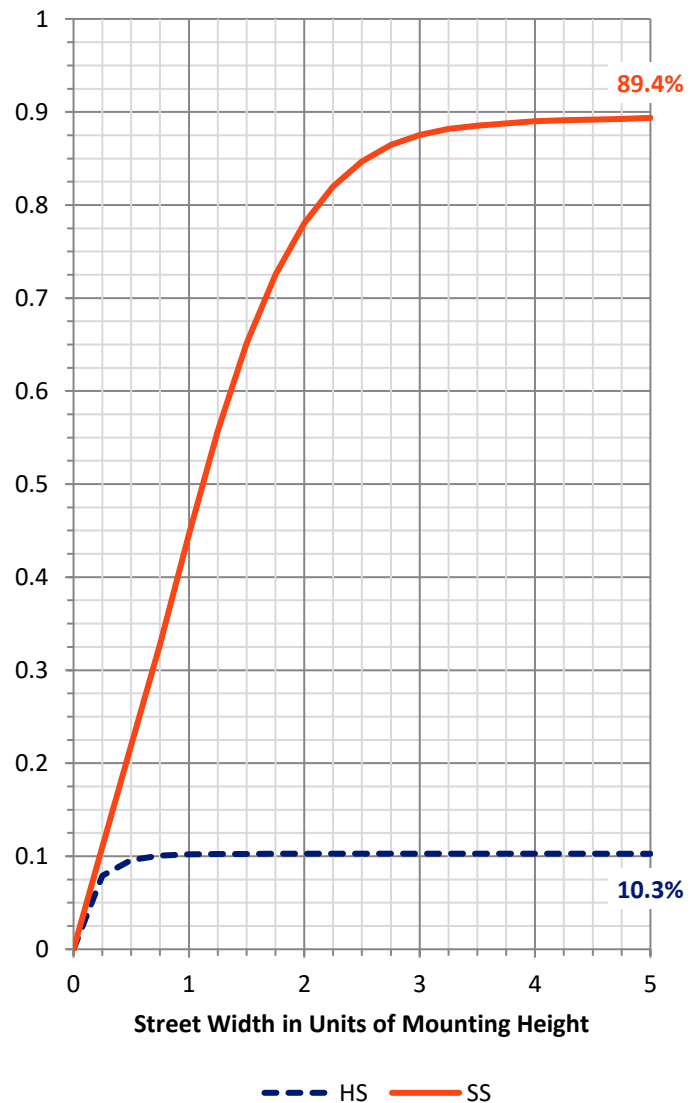
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1011.8	0.0	1011.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	8752.0	0.0	8752.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	9763.8	0.0	9763.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	1.1
10°-20°	277.1	2.8
20°-30°	432.2	4.4
30°-40°	730.6	7.5
40°-50°	1418.9	14.5
50°-60°	2382.8	24.4
60°-70°	2843.7	29.1
70°-80°	1498.7	15.3
80°-90°	76.1	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°	9763.8	100.0
0°-180°	9763.8	100.0

Coefficient of Utilization



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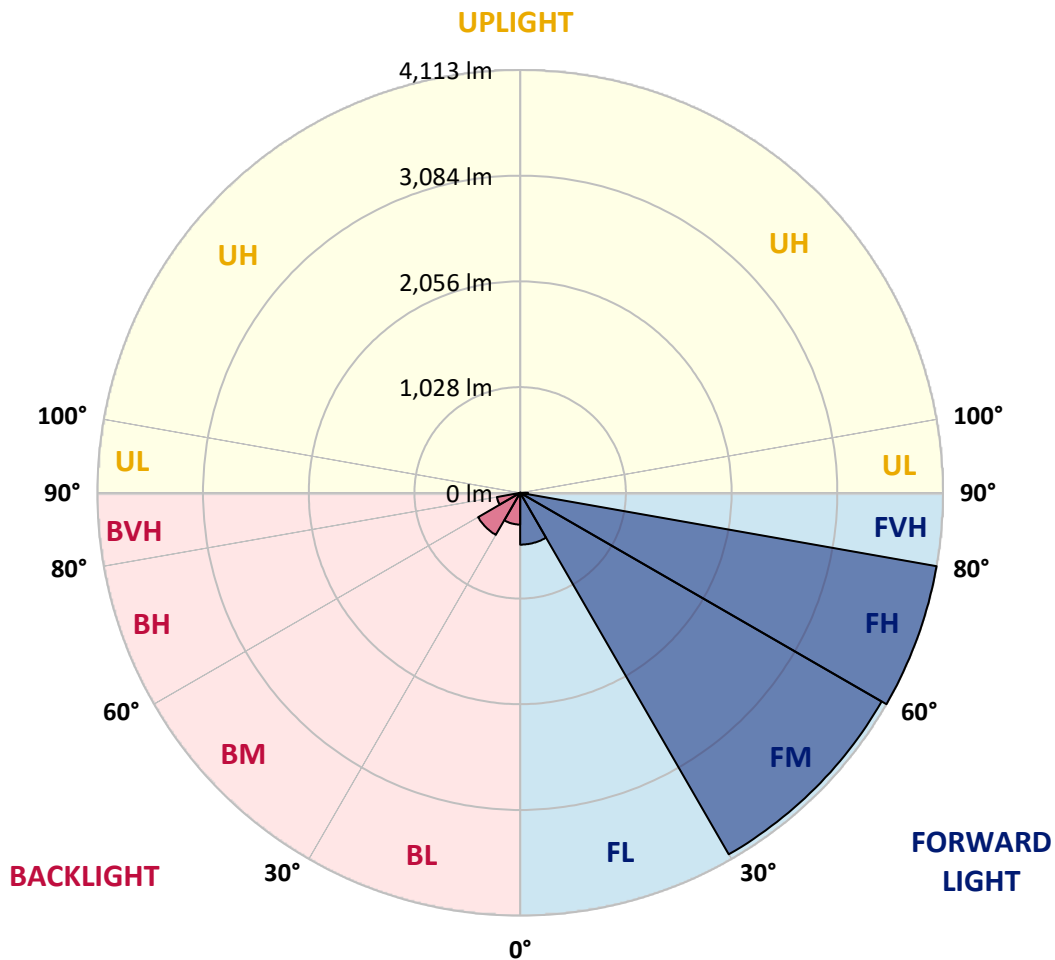
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	504.1	5.2			
FM	(30°-60°)	4059.9	41.6			
FH	(60°-80°)	4112.6	42.1			G2/5000
FVH	(80°-90°)	75.4	0.8			G1/100
BL	(0°-30°)	308.9	3.2	B1/500		
BM	(30°-60°)	472.5	4.8	B1/1000		
BH	(60°-80°)	229.8	2.4	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5
2.5°	1087.5	1087.5	1087.5	1089.9	1092.1	1092.1	1096.7	1094.3	1094.3	1094.3	1098.8
5°	1057.9	1060.2	1062.4	1067.0	1076.2	1082.9	1094.3	1094.3	1096.7	1101.2	1103.5
7.5°	1017.1	1019.2	1026.1	1035.1	1053.4	1069.3	1087.5	1092.1	1098.8	1110.2	1114.8
10°	992.0	996.5	1005.7	1017.1	1037.5	1057.9	1080.8	1087.5	1108.0	1128.5	1139.9
12.5°	985.1	987.4	996.5	1014.7	1039.8	1064.9	1094.3	1101.2	1130.7	1162.5	1180.8
15°	996.5	998.7	1003.3	1023.8	1053.4	1085.2	1123.9	1133.0	1169.5	1205.9	1228.6
17.5°	1017.1	1017.1	1021.6	1039.8	1071.6	1108.0	1158.0	1171.7	1212.6	1253.7	1278.6
20°	1030.6	1030.6	1037.5	1055.7	1092.1	1139.9	1199.0	1217.3	1262.7	1308.2	1331.0
22.5°	1044.3	1046.5	1053.4	1073.8	1114.8	1180.8	1249.1	1267.2	1319.6	1367.4	1390.1
25°	1082.9	1080.8	1082.9	1101.2	1148.9	1230.9	1317.4	1340.1	1394.7	1447.0	1458.4
27.5°	1190.0	1185.4	1155.8	1144.4	1180.8	1283.1	1403.8	1426.5	1490.3	1542.6	1542.6
30°	1435.6	1426.5	1353.7	1260.4	1230.9	1331.0	1485.6	1517.5	1599.4	1644.9	1631.3
32.5°	1747.4	1726.8	1633.6	1474.3	1356.0	1394.7	1572.2	1608.5	1713.2	1751.9	1722.3
35°	2088.6	2086.4	1970.3	1765.4	1597.1	1526.6	1683.7	1726.8	1858.9	1893.0	1845.2
37.5°	2450.3	2459.5	2382.0	2100.0	1902.0	1742.8	1831.6	1881.6	2043.0	2084.1	2038.6
40°	2853.0	2850.9	2821.1	2486.8	2268.3	2049.9	2045.4	2090.8	2286.5	2350.2	2286.5
42.5°	3362.6	3358.1	3251.2	2950.9	2712.1	2450.3	2357.1	2373.1	2591.4	2696.1	2602.7
45°	3881.4	3849.5	3726.7	3467.4	3255.7	2946.4	2768.8	2768.8	2955.5	3098.8	2953.2
47.5°	4170.4	4138.5	4088.5	3945.1	3881.4	3535.5	3274.0	3242.2	3387.7	3533.4	3328.6
50°	4550.4	4550.4	4425.2	4370.7	4479.8	4236.3	3831.5	3799.6	3870.1	3986.0	3717.6
52.5°	4850.7	4796.1	4707.3	4755.1	5066.8	4955.3	4388.8	4327.3	4381.9	4411.5	4056.7
55°	4975.8	4923.5	4916.7	5091.9	5574.2	5419.5	4959.8	4905.3	4900.8	4755.1	4352.4
57.5°	5000.9	4955.3	5041.7	5348.9	6068.0	5799.4	5528.7	5487.7	5360.2	4996.3	4654.9
60°	4789.3	4812.0	5021.3	5490.0	6359.1	6129.2	6008.8	5965.5	5672.0	5201.0	4991.7
62.5°	4354.7	4409.3	4800.6	5503.6	6252.2	6263.5	6274.9	6245.3	5913.2	5387.6	5330.7
65°	3840.4	3856.5	4327.3	5314.8	6065.5	6222.6	6470.6	6468.2	6097.4	5596.9	5713.0
67.5°	3164.8	3192.0	3599.2	4677.7	5692.5	6204.4	6727.6	6720.8	6306.8	5835.7	5940.4
70°	2354.7	2389.0	2718.8	3638.0	4859.7	5976.9	7064.5	7068.9	6527.4	6017.8	5783.5
71°	1836.0	1897.5	2243.2	3089.7	4434.4	5747.0	7096.3	7137.3	6552.4	5992.9	5460.3
72.5°	901.0	973.8	1408.4	2175.1	3649.4	5232.8	6886.9	6966.5	6395.6	5681.2	4668.6
75°	234.4	248.0	420.9	889.6	1956.7	3467.4	5553.7	5756.2	5228.3	4325.1	2853.0
77.5°	148.0	152.4	197.9	345.8	732.6	1317.4	3262.6	3362.6	2987.4	2191.0	1005.7
80°	104.7	107.0	125.1	223.0	427.8	384.6	1173.9	1217.3	1080.8	580.1	179.8
82.5°	63.7	63.7	91.0	143.3	263.9	209.3	309.5	329.9	291.2	161.5	59.2
85°	36.4	38.6	57.0	97.8	125.1	102.3	116.1	122.9	125.1	107.0	25.1
87.5°	29.6	31.9	50.0	81.9	68.2	50.0	50.0	52.3	54.5	63.7	11.4
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°	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5
2.5°	1098.8	1098.8	1101.2	1098.8	1098.8	1098.8	1101.2	1101.2	1101.2	1105.8	1108.0
5°	1103.5	1103.5	1103.5	1101.2	1098.8	1098.8	1103.5	1105.8	1105.8	1112.6	1112.6
7.5°	1114.8	1114.8	1110.2	1105.8	1101.2	1094.3	1096.7	1098.8	1096.7	1098.8	1098.8
10°	1139.9	1139.9	1133.0	1123.9	1110.2	1089.9	1062.4	1028.4	996.5	985.1	980.6
12.5°	1180.8	1178.5	1164.9	1148.9	1119.4	1048.9	946.5	825.9	725.8	698.5	689.4
15°	1226.4	1221.8	1205.9	1178.5	1098.8	912.4	698.5	543.7	448.3	425.4	420.9
17.5°	1274.1	1267.2	1244.5	1190.0	1005.7	678.0	450.5	341.3	289.0	284.5	286.6
20°	1324.1	1315.1	1283.1	1167.2	812.2	452.7	291.2	263.9	259.4	259.4	261.6
22.5°	1381.1	1369.6	1326.3	1085.2	591.5	300.4	250.3	248.0	245.7	243.4	243.4
25°	1447.0	1433.3	1367.4	937.4	407.2	245.7	238.9	232.0	227.5	223.0	220.8
27.5°	1526.6	1508.4	1399.2	755.4	279.8	229.7	225.2	213.8	204.8	195.7	195.7
30°	1606.3	1583.5	1390.1	568.7	227.5	213.8	204.8	191.1	177.4	168.3	166.0
32.5°	1690.4	1667.8	1331.0	382.1	207.0	195.7	184.3	163.9	148.0	136.5	134.2
35°	1815.6	1797.4	1215.0	252.6	186.6	173.0	156.9	136.5	116.1	104.7	102.3
37.5°	2002.1	1979.3	1071.6	193.3	163.9	143.3	129.6	107.0	86.4	75.1	72.9
40°	2252.4	2184.1	901.0	170.7	143.3	118.2	100.2	77.3	61.4	54.5	54.5
42.5°	2543.6	2382.0	716.7	154.7	127.4	97.8	72.9	52.3	43.2	41.0	41.0
45°	2853.0	2566.4	532.3	143.3	111.5	77.3	52.3	36.4	31.9	29.6	29.6
47.5°	3171.6	2716.6	370.8	129.6	93.2	59.2	36.4	27.3	22.7	20.5	20.5
50°	3469.7	2814.4	261.6	116.1	79.6	43.2	27.3	20.5	15.9	15.9	15.9
52.5°	3676.7	2805.2	188.9	100.2	61.4	29.6	18.1	13.7	13.7	13.7	13.7
55°	3858.7	2771.1	148.0	86.4	47.8	20.5	13.7	11.4	11.4	9.2	9.2
57.5°	4013.4	2716.6	125.1	70.5	34.1	15.9	9.2	9.2	6.8	6.8	6.8
60°	4145.4	2648.4	104.7	59.2	22.7	11.4	6.8	4.5	4.5	2.2	4.5
62.5°	4325.1	2605.1	91.0	45.5	15.9	6.8	4.5	2.2	2.2	0.0	0.0
65°	4457.0	2523.2	77.3	31.9	9.2	4.5	2.2	2.2	0.0	0.0	0.0
67.5°	4461.6	2375.3	57.0	18.1	6.8	4.5	2.2	0.0	0.0	0.0	0.0
70°	4102.1	2024.9	36.4	9.2	4.5	2.2	2.2	0.0	0.0	0.0	0.0
71°	3772.3	1792.8	29.6	6.8	4.5	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3107.9	1317.4	22.7	6.8	2.2	2.2	0.0	0.0	0.0	0.0	0.0
75°	1713.2	477.8	11.4	4.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	548.3	145.6	6.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	93.2	22.7	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.9	9.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.2	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	2.2	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)