

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: P398132

Luminaire Tested: **ARCH-S-PA1-90-740-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-740-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7959 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

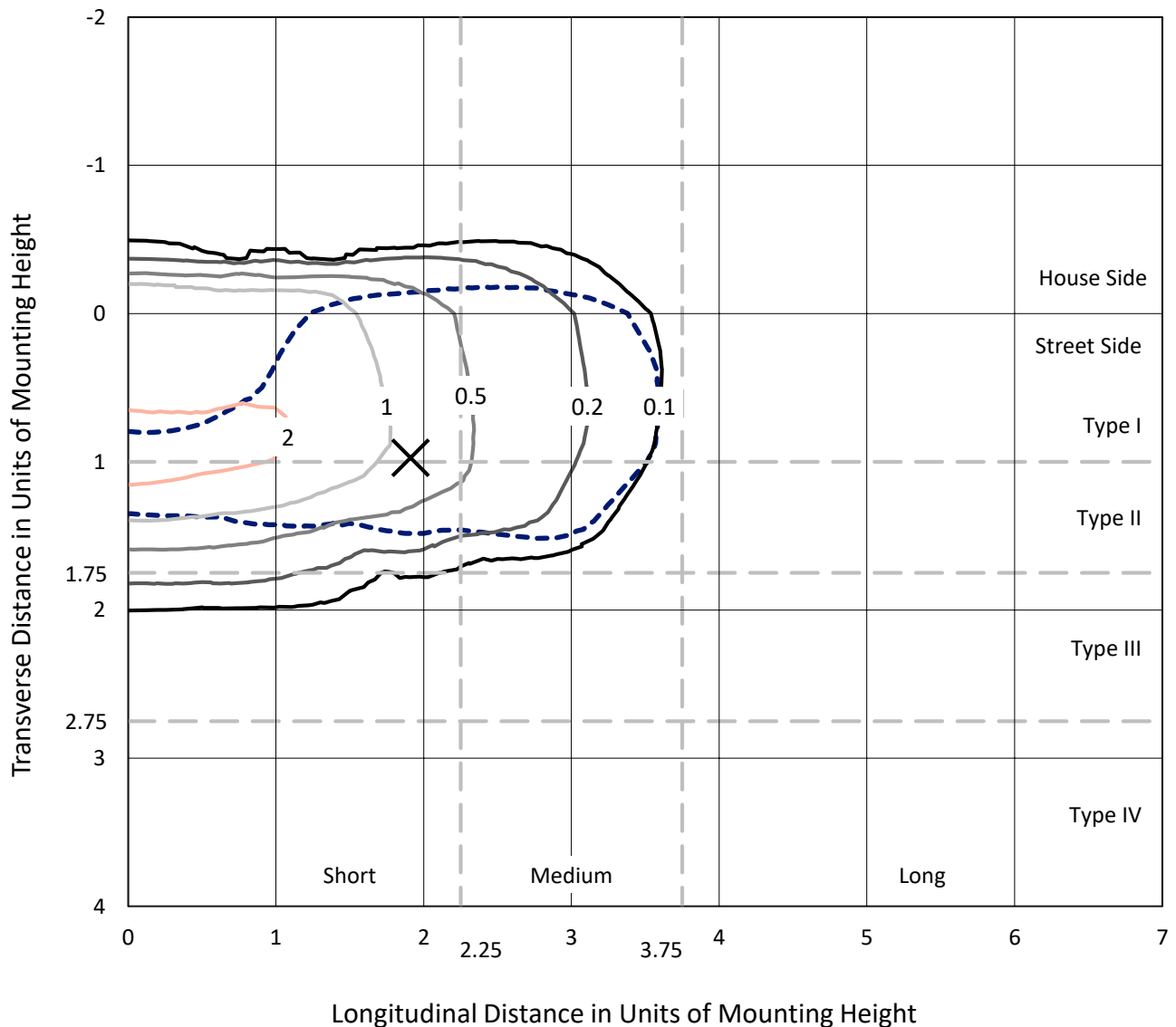
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

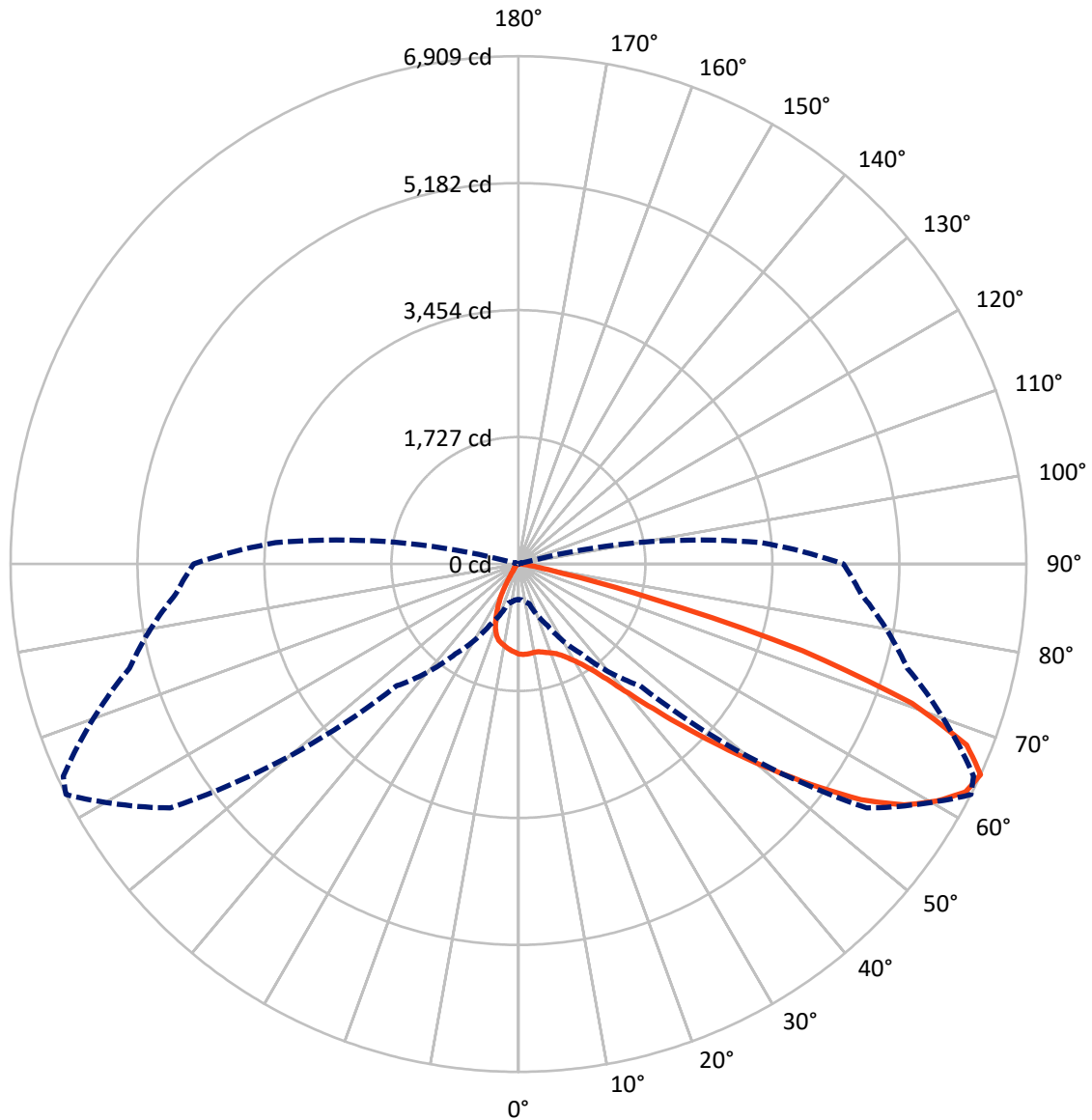
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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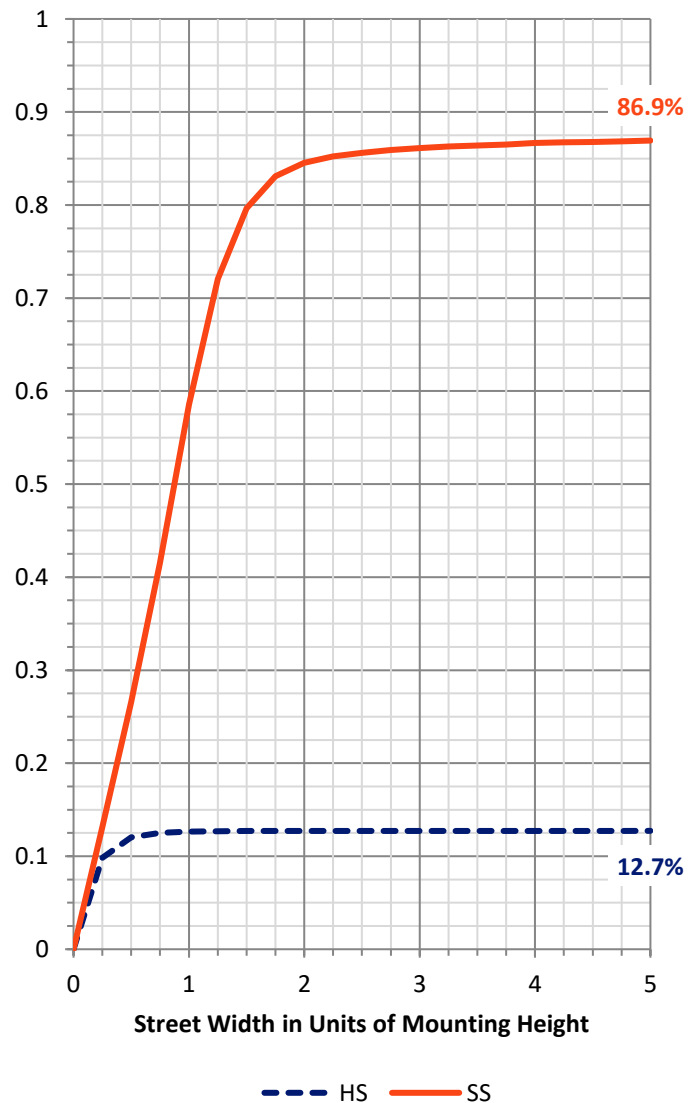
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1024.3	0.0	1024.3
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	6934.7	0.0	6934.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	7959.0	0.0	7959.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.9	1.4
10°-20°	276.0	3.5
20°-30°	409.1	5.1
30°-40°	759.5	9.5
40°-50°	1609.0	20.2
50°-60°	2224.9	28.0
60°-70°	1781.1	22.4
70°-80°	740.0	9.3
80°-90°	47.5	0.6
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°	7959.0	100.0
0°-180°	7959.0	100.0



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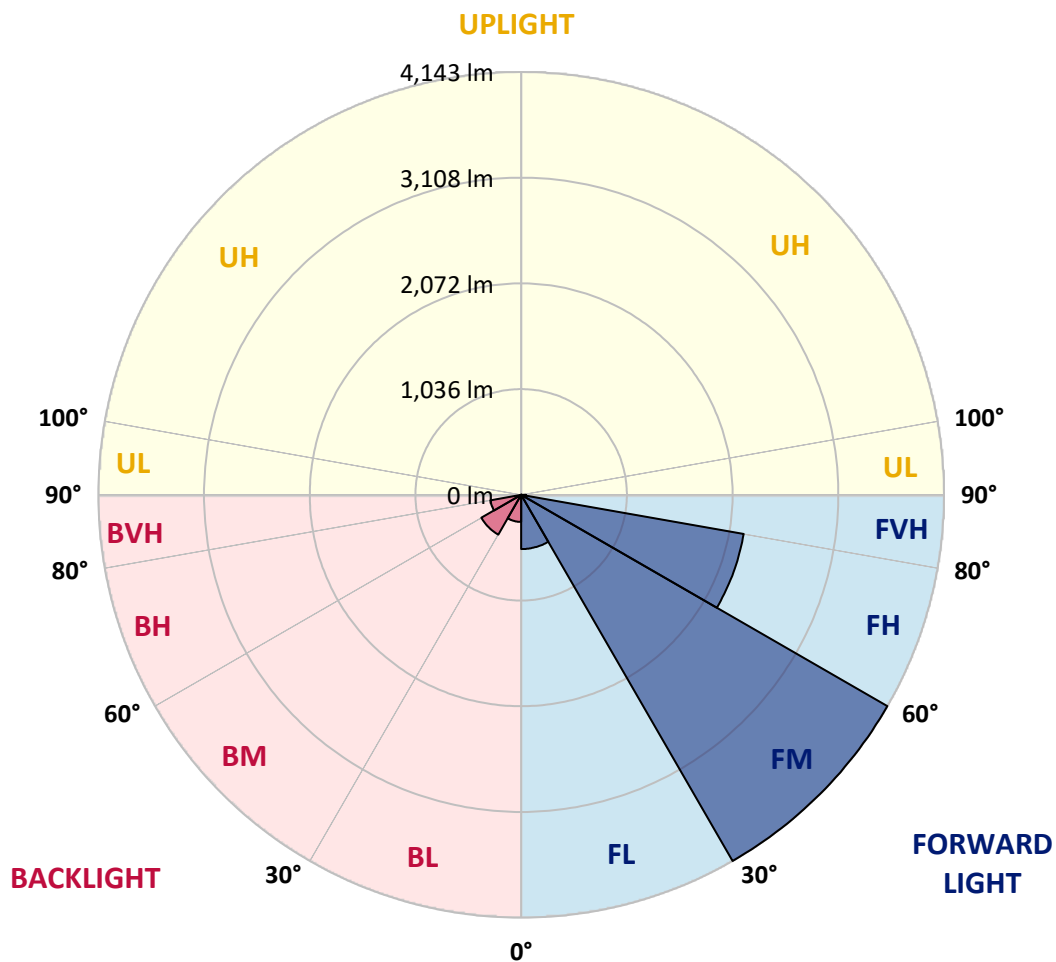
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	531.5	6.7			
FM	(30°-60°)	4143.5	52.1			
FH	(60°-80°)	2214.4	27.8			G2/5000
FVH	(80°-90°)	45.4	0.6			G1/100
BL	(0°-30°)	265.5	3.3	B1/500		
BM	(30°-60°)	450.0	5.7	B1/1000		
BH	(60°-80°)	306.7	3.9	B1/500		G1/500
BVH	(80°-90°)	2.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1247.1	1244.1	1241.1	1239.6	1239.6	1238.1	1232.1	1230.6	1227.6	1224.6	1221.6
5°	1235.1	1230.6	1229.1	1230.6	1232.1	1235.1	1232.1	1232.1	1229.1	1226.1	1220.1
7.5°	1205.1	1202.0	1203.5	1208.1	1209.6	1220.1	1221.6	1226.1	1226.1	1223.1	1218.6
10°	1169.0	1167.5	1167.5	1175.0	1182.5	1197.5	1208.1	1220.1	1221.6	1221.6	1214.1
12.5°	1141.9	1140.4	1145.0	1154.0	1169.0	1188.5	1206.6	1224.6	1227.6	1229.1	1217.1
15°	1125.4	1125.4	1131.4	1149.5	1170.5	1197.5	1218.6	1242.6	1245.6	1244.1	1227.6
17.5°	1110.4	1111.9	1123.9	1154.0	1178.0	1214.1	1239.6	1266.7	1268.2	1266.7	1239.6
20°	1104.4	1107.4	1125.4	1164.5	1191.5	1232.1	1265.2	1292.2	1293.7	1287.7	1251.6
22.5°	1120.9	1122.4	1145.0	1187.0	1212.6	1257.6	1299.7	1325.3	1326.8	1317.7	1269.7
25°	1178.0	1178.0	1197.5	1233.6	1256.1	1301.2	1346.3	1376.3	1376.3	1365.8	1310.2
27.5°	1311.7	1299.7	1295.2	1305.7	1313.2	1361.3	1409.4	1447.0	1445.5	1430.4	1362.8
30°	1570.2	1540.1	1492.0	1437.9	1410.9	1444.0	1489.0	1537.1	1535.6	1511.6	1427.4
32.5°	2004.4	1960.8	1846.6	1703.9	1588.2	1550.6	1592.7	1645.3	1646.8	1618.3	1531.1
35°	2613.0	2543.8	2339.5	2141.1	1876.7	1734.0	1746.0	1803.1	1821.1	1806.1	1705.4
37.5°	3198.9	3135.8	2940.5	2665.5	2306.4	2014.9	1963.8	2013.4	2034.5	2034.5	1927.8
40°	3789.5	3715.8	3543.0	3266.6	2887.9	2453.7	2270.4	2310.9	2333.5	2338.0	2198.2
42.5°	4262.8	4214.7	4082.5	3867.6	3513.0	3223.0	2712.1	2689.6	2710.6	2694.1	2512.3
45°	4590.3	4552.8	4461.1	4380.0	4207.2	4061.4	3302.6	3150.9	3164.4	3107.3	2865.4
47.5°	4657.9	4615.9	4596.3	4709.0	4832.2	4868.3	4028.4	3699.3	3685.8	3559.6	3232.0
50°	4363.4	4367.9	4440.1	4761.6	5275.5	5600.0	4869.8	4318.4	4268.8	3987.8	3573.1
52.5°	3727.8	3800.0	3981.8	4503.2	5410.7	6131.9	5711.2	4975.0	4898.3	4404.0	3828.5
55°	2916.5	3009.6	3308.6	3908.2	5128.2	6369.3	6420.4	5657.1	5482.8	4716.5	4026.9
57.5°	2168.2	2196.7	2545.3	3092.3	4459.6	6136.5	6784.1	6183.0	5959.1	4966.0	4223.7
60°	1350.8	1368.8	1737.0	2354.5	3377.8	5275.5	6784.1	6545.1	6331.8	5189.8	4404.0
62.5°	839.9	845.9	984.2	1613.7	2295.9	3912.7	6503.1	6826.1	6654.8	5350.6	4558.8
65°	483.8	489.8	554.4	912.1	1493.5	2342.5	5784.9	6908.8	6832.1	5478.3	4679.0
67.5°	353.1	356.1	381.7	512.4	976.7	1203.5	4345.4	6576.7	6672.9	5541.4	4676.0
70°	306.5	311.0	344.1	399.7	704.7	739.3	2211.8	5679.7	5948.6	5451.3	4536.2
72.5°	235.9	241.9	291.5	375.6	516.9	531.9	800.9	4041.9	4449.1	4887.8	4153.1
75°	162.3	168.3	217.9	309.5	426.7	398.2	440.2	1860.2	2347.0	3278.6	3161.4
77.5°	103.7	105.2	136.7	225.4	368.1	282.5	302.0	607.0	852.0	1483.0	1492.0
80°	69.1	70.6	84.1	145.7	252.4	261.4	186.3	281.0	308.0	432.7	300.5
82.5°	42.1	42.1	57.1	91.7	153.3	216.4	121.7	147.3	157.8	166.8	78.1
85°	16.5	16.5	34.6	60.1	96.2	100.7	76.6	85.6	90.2	97.7	36.1
87.5°	4.5	4.5	19.5	33.1	42.1	46.6	46.6	42.1	45.1	55.6	18.0
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°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1220.1	1215.6	1209.6	1203.5	1197.5	1193.0	1188.5	1188.5	1185.5	1181.0	1178.0
5°	1217.1	1209.6	1196.0	1185.5	1169.0	1157.0	1148.0	1140.4	1135.9	1125.4	1123.9
7.5°	1212.6	1203.5	1184.0	1163.0	1135.9	1114.9	1093.9	1078.8	1063.8	1051.8	1048.8
10°	1205.1	1194.5	1166.0	1135.9	1098.4	1059.3	1009.7	952.6	900.0	870.0	861.0
12.5°	1205.1	1191.5	1154.0	1113.4	1059.3	963.1	836.9	710.7	613.0	569.5	557.4
15°	1212.6	1194.5	1145.0	1089.4	988.7	793.4	589.0	422.2	315.5	282.5	275.0
17.5°	1220.1	1194.5	1131.4	1056.3	859.5	575.5	335.1	222.4	187.8	180.3	180.3
20°	1223.1	1191.5	1113.4	994.7	686.7	357.6	199.8	166.8	153.3	148.8	148.8
22.5°	1235.1	1193.0	1099.9	906.0	498.8	210.4	157.8	139.7	126.2	121.7	121.7
25°	1265.2	1211.1	1102.9	793.4	320.0	159.3	133.7	115.7	102.2	96.2	96.2
27.5°	1313.2	1251.6	1119.4	662.6	201.3	136.7	112.7	93.2	82.6	76.6	76.6
30°	1367.3	1296.7	1126.9	512.4	150.3	115.7	91.7	73.6	66.1	61.6	60.1
32.5°	1462.0	1374.8	1120.9	351.6	123.2	97.7	73.6	58.6	52.6	51.1	51.1
35°	1613.7	1511.6	1108.9	220.9	102.2	78.1	58.6	48.1	43.6	42.1	40.6
37.5°	1819.6	1711.4	1072.8	145.7	84.1	61.6	48.1	40.6	36.1	34.6	34.6
40°	2070.5	1939.8	1003.7	111.2	72.1	49.6	40.6	34.6	31.6	30.1	30.1
42.5°	2357.5	2193.7	894.0	96.2	60.1	42.1	34.6	28.5	27.0	25.5	25.5
45°	2671.6	2459.7	742.3	85.6	51.1	34.6	28.5	25.5	22.5	22.5	21.0
47.5°	3005.1	2727.1	571.0	75.1	43.6	30.1	25.5	21.0	19.5	18.0	18.0
50°	3326.7	2966.1	401.2	64.6	36.1	25.5	21.0	18.0	16.5	15.0	15.0
52.5°	3553.6	3110.3	284.0	55.6	30.1	22.5	16.5	13.5	12.0	12.0	12.0
55°	3735.4	3200.5	198.3	46.6	25.5	19.5	13.5	10.5	10.5	9.0	9.0
57.5°	3906.7	3259.1	145.7	39.1	21.0	15.0	10.5	7.5	7.5	6.0	6.0
60°	4084.0	3290.6	111.2	31.6	18.0	12.0	7.5	6.0	4.5	4.5	4.5
62.5°	4262.8	3310.1	85.6	25.5	15.0	9.0	6.0	4.5	3.0	1.5	1.5
65°	4419.0	3316.1	66.1	19.5	12.0	6.0	4.5	1.5	0.0	0.0	0.0
67.5°	4465.6	3247.0	51.1	15.0	9.0	4.5	3.0	0.0	0.0	0.0	0.0
70°	4339.4	3063.7	39.1	12.0	7.5	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	3851.1	2569.4	30.1	7.5	6.0	3.0	1.5	0.0	0.0	0.0	0.0
75°	2755.7	1370.3	21.0	6.0	4.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	1268.2	530.4	15.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0	0.0
80°	247.9	132.2	6.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	57.1	22.5	3.0	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.5	7.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.0	1.5	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)