

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: P398069

Luminaire Tested: **ARCH-S-PA1-80-750-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398069
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-PA1-80-750-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1050mA 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: 7425 lumens
Efficiency: N/A
Efficacy: 89.5 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

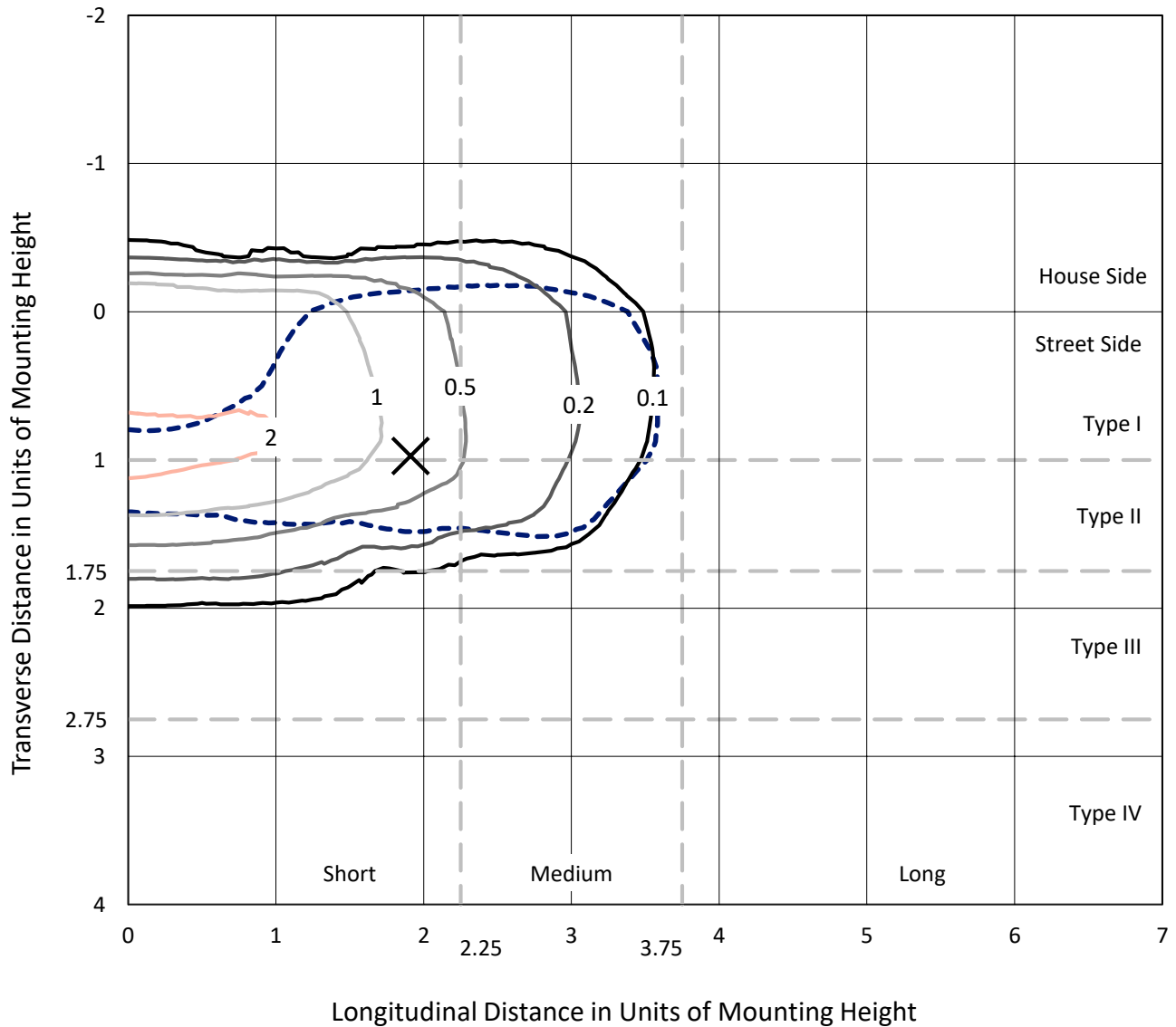
Input Watts (W): 83
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

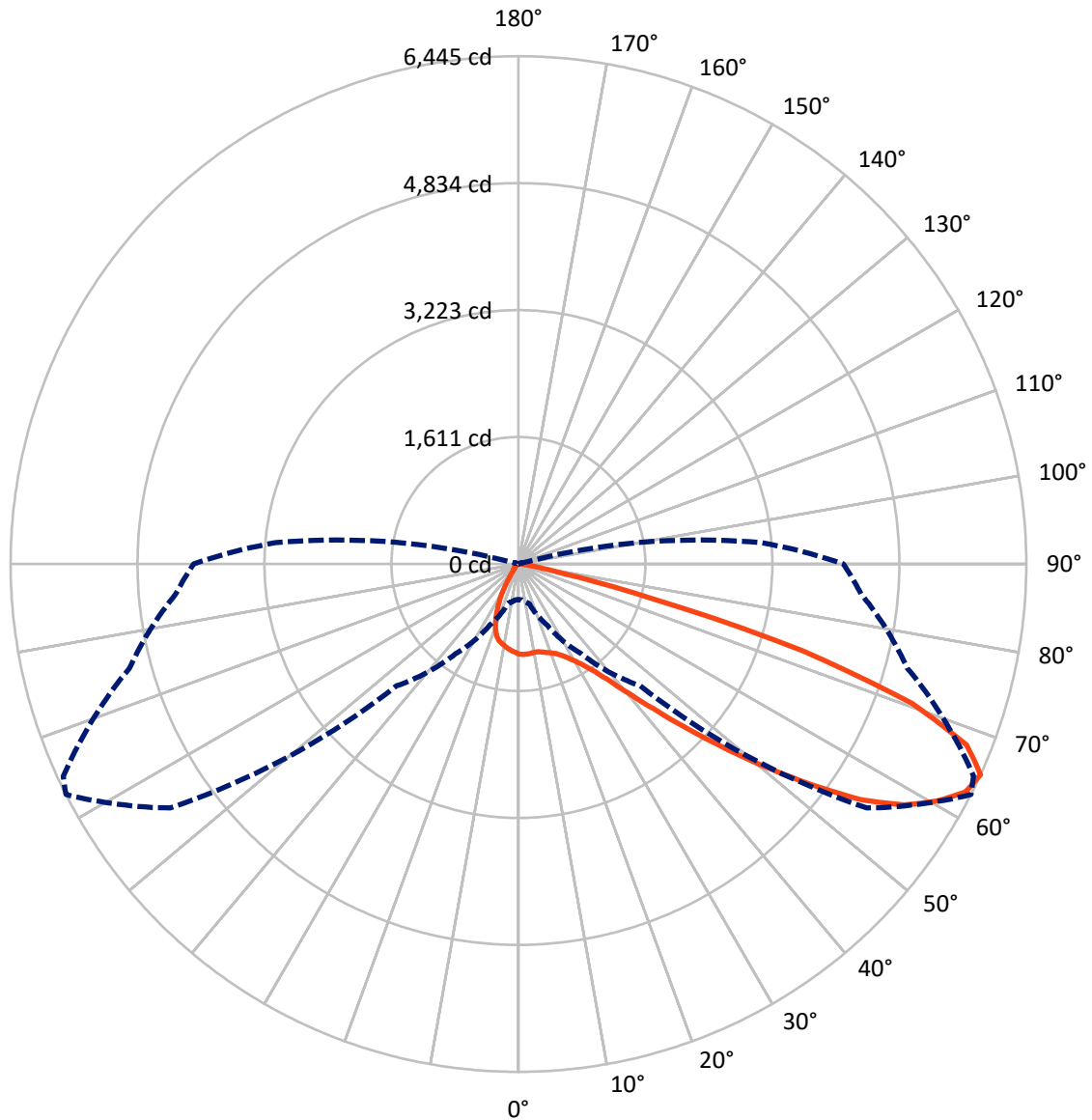
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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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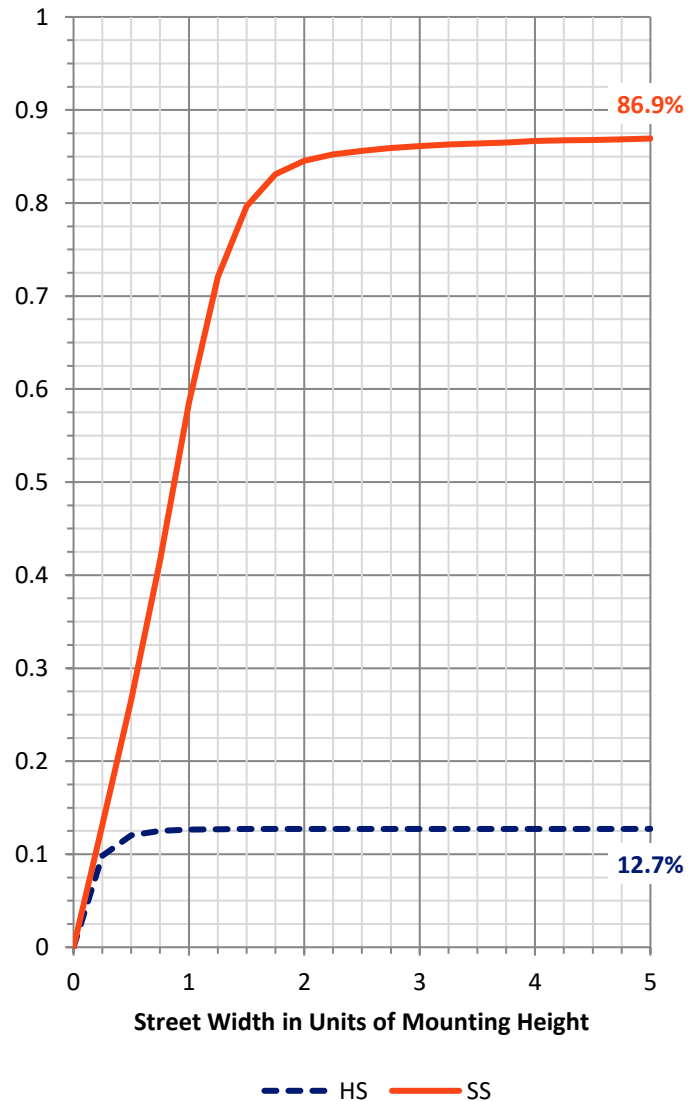
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	955.6	0.0	955.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	6469.4	0.0	6469.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	7425.0	0.0	7425.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	1.4
10°-20°	257.5	3.5
20°-30°	381.6	5.1
30°-40°	708.6	9.5
40°-50°	1501.1	20.2
50°-60°	2075.6	28.0
60°-70°	1661.6	22.4
70°-80°	690.3	9.3
80°-90°	44.3	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°	7425.0	100.0
0°-180°	7425.0	100.0



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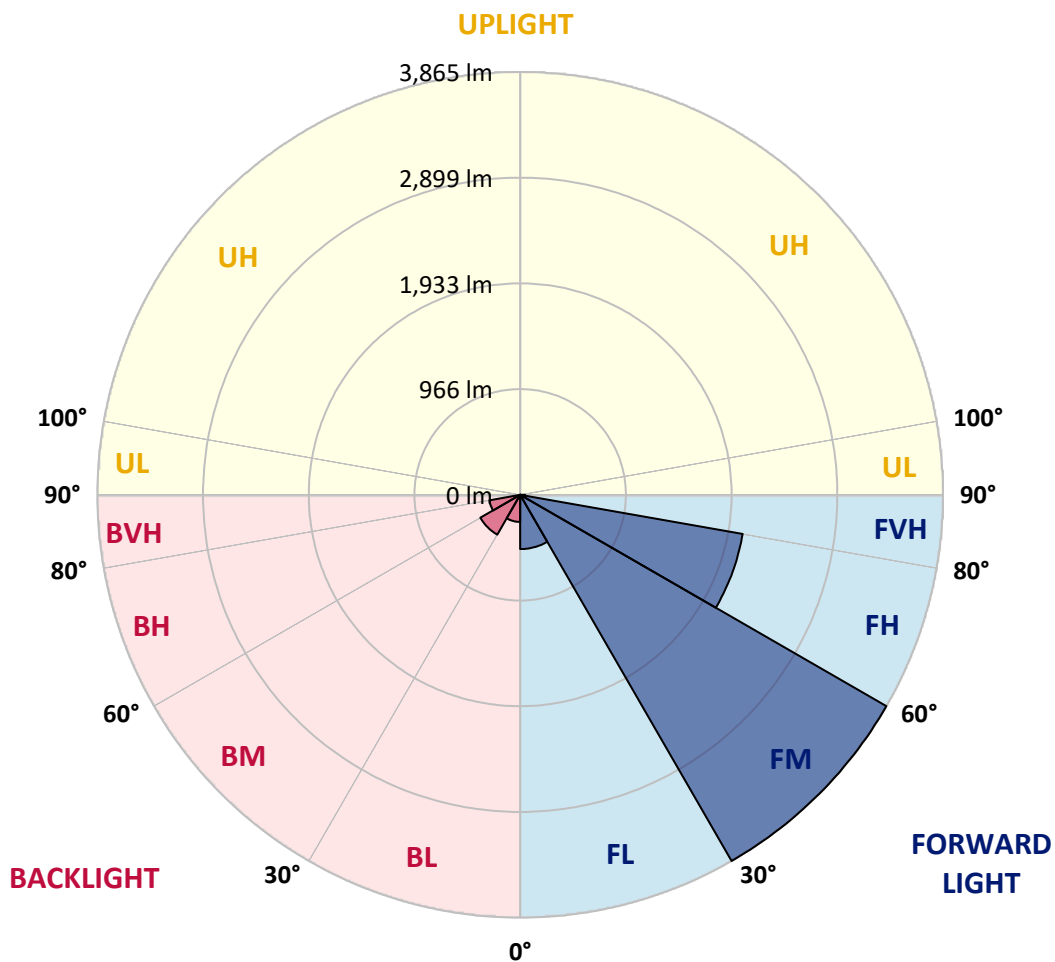
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	495.8	6.7			
FM	(30°-60°)	3865.5	52.1			
FH	(60°-80°)	2065.8	27.8			G2/5000
FVH	(80°-90°)	42.3	0.6			G1/100
BL	(0°-30°)	247.7	3.3	B1/500		
BM	(30°-60°)	419.8	5.7	B1/1000		
BH	(60°-80°)	286.1	3.9	B1/500		G1/500
BVH	(80°-90°)	2.0	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°	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8
2.5°	1163.4	1160.6	1157.8	1156.4	1156.4	1155.0	1149.4	1148.0	1145.2	1142.4	1139.6
5°	1152.2	1148.0	1146.6	1148.0	1149.4	1152.2	1149.4	1149.4	1146.6	1143.8	1138.2
7.5°	1124.2	1121.4	1122.8	1127.0	1128.4	1138.2	1139.6	1143.8	1143.8	1141.0	1136.8
10°	1090.6	1089.2	1089.2	1096.2	1103.2	1117.2	1127.0	1138.2	1139.6	1139.6	1132.6
12.5°	1065.3	1063.9	1068.1	1076.5	1090.6	1108.8	1125.6	1142.4	1145.2	1146.6	1135.4
15°	1049.9	1049.9	1055.5	1072.3	1092.0	1117.2	1136.8	1159.2	1162.0	1160.6	1145.2
17.5°	1035.9	1037.3	1048.5	1076.5	1099.0	1132.6	1156.4	1181.7	1183.1	1181.7	1156.4
20°	1030.3	1033.1	1049.9	1086.4	1111.6	1149.4	1180.3	1205.5	1206.9	1201.3	1167.7
22.5°	1045.7	1047.1	1068.1	1107.4	1131.2	1173.3	1212.5	1236.3	1237.7	1229.3	1184.5
25°	1099.0	1099.0	1117.2	1150.8	1171.9	1213.9	1256.0	1284.0	1284.0	1274.2	1222.3
27.5°	1223.7	1212.5	1208.3	1218.1	1225.1	1270.0	1314.8	1349.9	1348.5	1334.5	1271.4
30°	1464.8	1436.8	1391.9	1341.5	1316.2	1347.1	1389.1	1434.0	1432.6	1410.2	1331.7
32.5°	1869.9	1829.3	1722.7	1589.6	1481.6	1446.6	1485.9	1534.9	1536.3	1509.7	1428.4
35°	2437.6	2373.2	2182.5	1997.5	1750.8	1617.6	1628.8	1682.1	1698.9	1684.9	1591.0
37.5°	2984.3	2925.4	2743.2	2486.7	2151.7	1879.7	1832.1	1878.3	1898.0	1898.0	1798.4
40°	3535.2	3466.5	3305.3	3047.4	2694.2	2289.1	2118.0	2155.9	2176.9	2181.1	2050.8
42.5°	3976.8	3931.9	3808.5	3608.1	3277.3	3006.7	2530.2	2509.1	2528.8	2513.3	2343.7
45°	4282.3	4247.3	4161.8	4086.1	3924.9	3788.9	3081.0	2939.5	2952.1	2898.8	2673.1
47.5°	4345.4	4306.2	4287.9	4393.1	4508.0	4541.7	3758.1	3451.1	3438.5	3320.7	3015.2
50°	4070.7	4074.9	4142.2	4442.1	4921.5	5224.3	4543.1	4028.6	3982.4	3720.2	3333.4
52.5°	3477.7	3545.0	3714.6	4201.0	5047.7	5720.5	5328.0	4641.2	4569.7	4108.5	3571.7
55°	2720.8	2807.7	3086.6	3645.9	4784.2	5942.0	5989.7	5277.6	5115.0	4400.1	3756.7
57.5°	2022.7	2049.4	2374.6	2884.8	4160.4	5724.7	6328.9	5768.2	5559.3	4632.8	3940.3
60°	1260.2	1277.0	1620.4	2196.5	3151.1	4921.5	6328.9	6106.0	5907.0	4841.6	4108.5
62.5°	783.6	789.2	918.1	1505.5	2141.9	3650.1	6066.8	6368.1	6208.3	4991.6	4252.9
65°	451.4	457.0	517.2	850.9	1393.3	2185.3	5396.7	6445.2	6373.7	5110.8	4365.0
67.5°	329.4	332.2	356.0	478.0	911.1	1122.8	4053.9	6135.4	6225.2	5169.6	4362.2
70°	286.0	290.2	321.0	372.9	657.4	689.7	2063.4	5298.6	5549.5	5085.5	4231.9
72.5°	220.1	225.7	271.9	350.4	482.2	496.2	747.1	3770.7	4150.6	4559.9	3874.4
75°	151.4	157.0	203.3	288.8	398.1	371.5	410.7	1735.4	2189.5	3058.6	2949.3
77.5°	96.7	98.1	127.6	210.3	343.4	263.5	281.8	566.3	794.8	1383.5	1391.9
80°	64.5	65.9	78.5	136.0	235.5	243.9	173.8	262.1	287.4	403.7	280.3
82.5°	39.2	39.2	53.3	85.5	143.0	201.9	113.5	137.4	147.2	155.6	72.9
85°	15.4	15.4	32.2	56.1	89.7	93.9	71.5	79.9	84.1	91.1	33.6
87.5°	4.2	4.2	18.2	30.8	39.2	43.5	43.5	39.2	42.1	51.9	16.8
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°	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8	1143.8
2.5°	1138.2	1134.0	1128.4	1122.8	1117.2	1113.0	1108.8	1108.8	1106.0	1101.8	1099.0
5°	1135.4	1128.4	1115.8	1106.0	1090.6	1079.3	1070.9	1063.9	1059.7	1049.9	1048.5
7.5°	1131.2	1122.8	1104.6	1085.0	1059.7	1040.1	1020.5	1006.5	992.4	981.2	978.4
10°	1124.2	1114.4	1087.8	1059.7	1024.7	988.2	942.0	888.7	839.6	811.6	803.2
12.5°	1124.2	1111.6	1076.5	1038.7	988.2	898.5	780.8	663.0	571.9	531.3	520.0
15°	1131.2	1114.4	1068.1	1016.3	922.3	740.1	549.5	393.9	294.4	263.5	256.5
17.5°	1138.2	1114.4	1055.5	985.4	801.8	536.9	312.6	207.5	175.2	168.2	168.2
20°	1141.0	1111.6	1038.7	928.0	640.6	333.6	186.4	155.6	143.0	138.8	138.8
22.5°	1152.2	1113.0	1026.1	845.3	465.4	196.2	147.2	130.4	117.7	113.5	113.5
25°	1180.3	1129.8	1028.9	740.1	298.6	148.6	124.8	107.9	95.3	89.7	89.7
27.5°	1225.1	1167.7	1044.3	618.2	187.8	127.6	105.1	86.9	77.1	71.5	71.5
30°	1275.6	1209.7	1051.3	478.0	140.2	107.9	85.5	68.7	61.7	57.5	56.1
32.5°	1363.9	1282.6	1045.7	328.0	114.9	91.1	68.7	54.7	49.1	47.7	47.7
35°	1505.5	1410.2	1034.5	206.1	95.3	72.9	54.7	44.9	40.7	39.2	37.8
37.5°	1697.5	1596.6	1000.8	136.0	78.5	57.5	44.9	37.8	33.6	32.2	32.2
40°	1931.6	1809.7	936.4	103.7	67.3	46.3	37.8	32.2	29.4	28.0	28.0
42.5°	2199.3	2046.6	834.0	89.7	56.1	39.2	32.2	26.6	25.2	23.8	23.8
45°	2492.3	2294.7	692.5	79.9	47.7	32.2	26.6	23.8	21.0	21.0	19.6
47.5°	2803.5	2544.2	532.7	70.1	40.7	28.0	23.8	19.6	18.2	16.8	16.8
50°	3103.5	2767.0	374.3	60.3	33.6	23.8	19.6	16.8	15.4	14.0	14.0
52.5°	3315.1	2901.6	264.9	51.9	28.0	21.0	15.4	12.6	11.2	11.2	11.2
55°	3484.7	2985.7	185.0	43.5	23.8	18.2	12.6	9.8	9.8	8.4	8.4
57.5°	3644.5	3040.4	136.0	36.4	19.6	14.0	9.8	7.0	7.0	5.6	5.6
60°	3809.9	3069.8	103.7	29.4	16.8	11.2	7.0	5.6	4.2	4.2	4.2
62.5°	3976.8	3088.0	79.9	23.8	14.0	8.4	5.6	4.2	2.8	1.4	1.4
65°	4122.5	3093.7	61.7	18.2	11.2	5.6	4.2	1.4	0.0	0.0	0.0
67.5°	4166.0	3029.2	47.7	14.0	8.4	4.2	2.8	0.0	0.0	0.0	0.0
70°	4048.2	2858.2	36.4	11.2	7.0	2.8	1.4	0.0	0.0	0.0	0.0
72.5°	3592.7	2397.0	28.0	7.0	5.6	2.8	1.4	0.0	0.0	0.0	0.0
75°	2570.8	1278.4	19.6	5.6	4.2	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	1183.1	494.8	14.0	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0
80°	231.3	123.4	5.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	53.3	21.0	2.8	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.2	7.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	2.8	1.4	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)