

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: P398118

Luminaire Tested: **ARCH-S-PA1-90-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6871 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

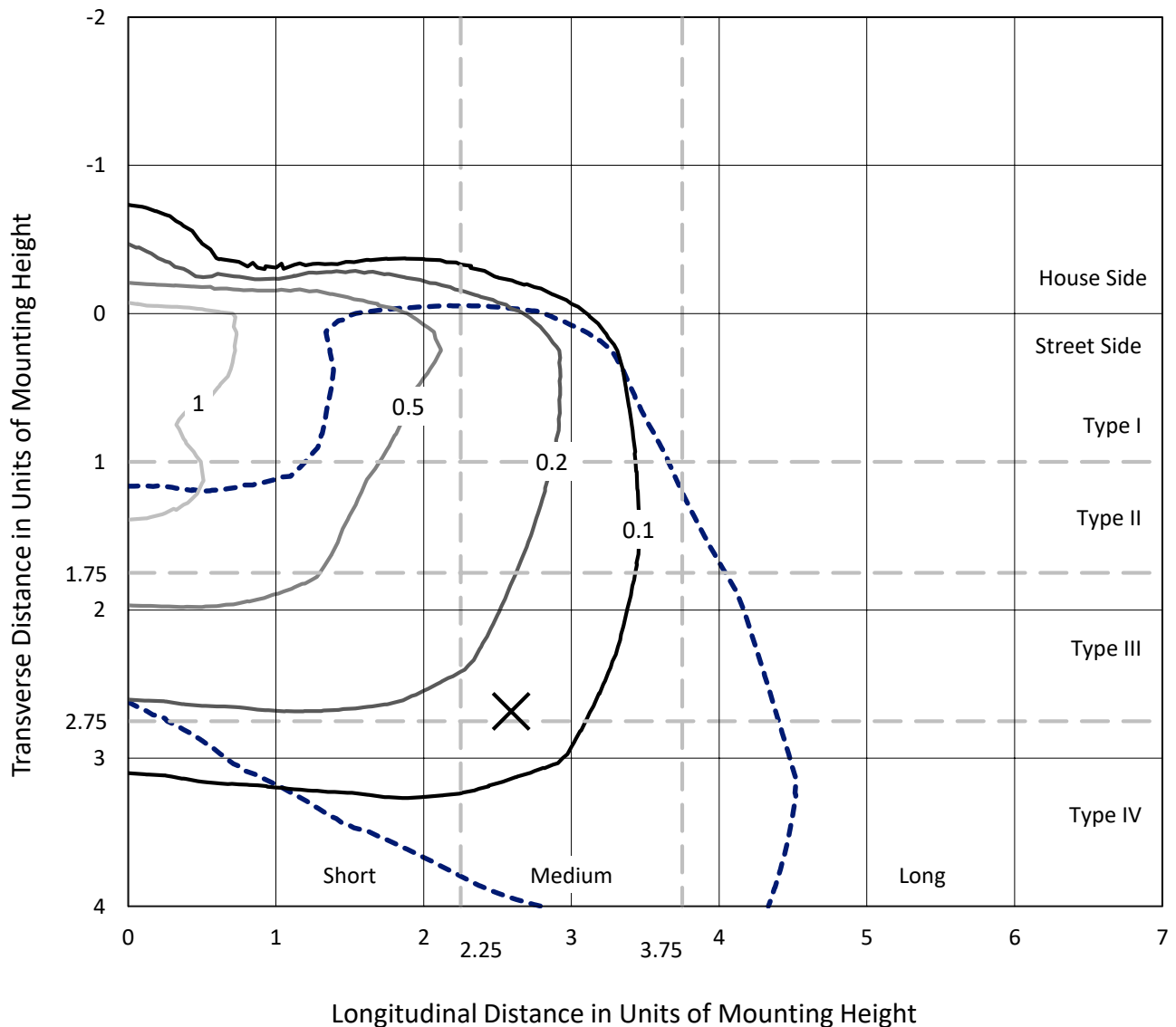
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

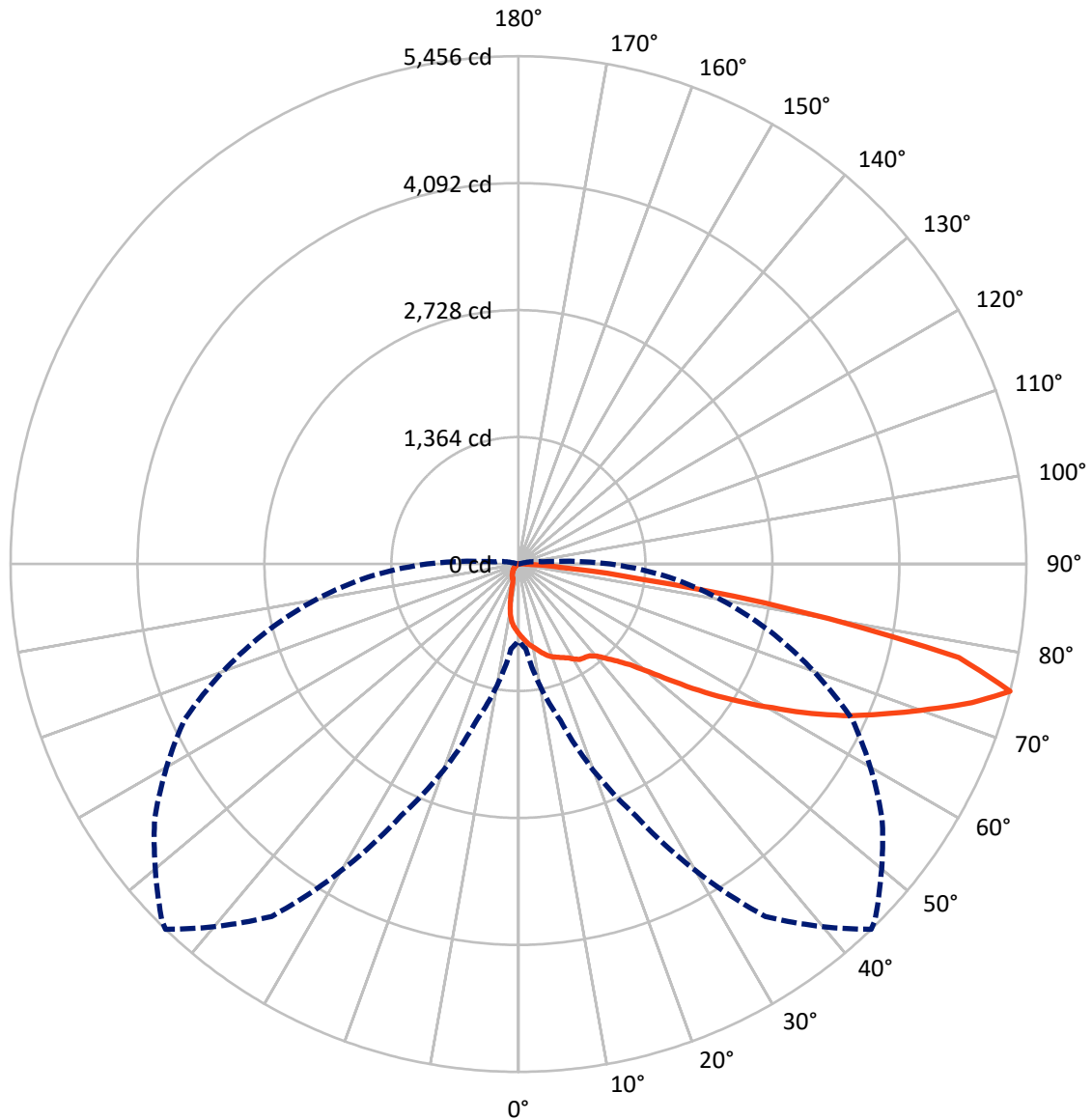


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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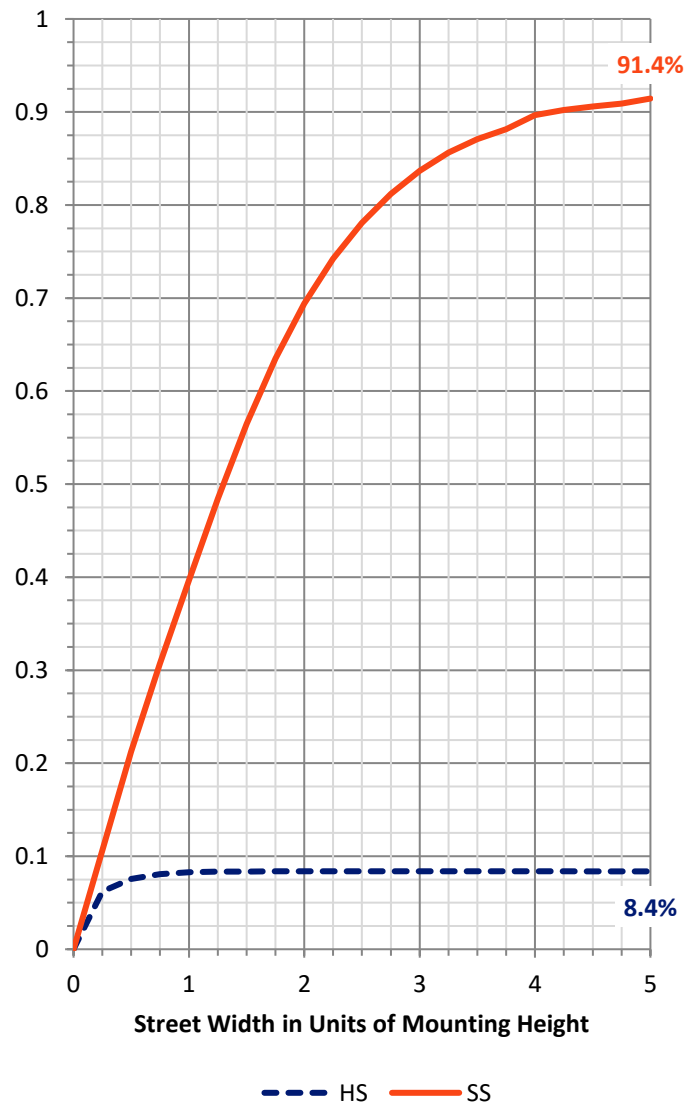
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	579.4	0.0	579.4
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6291.6	0.0	6291.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	6871.0	0.0	6871.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	1.0
10°-20°	197.6	2.9
20°-30°	326.2	4.7
30°-40°	473.4	6.9
40°-50°	769.5	11.2
50°-60°	1356.6	19.7
60°-70°	1949.7	28.4
70°-80°	1561.2	22.7
80°-90°	166.3	2.4
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°	6871.0	100.0
0°-180°	6871.0	100.0



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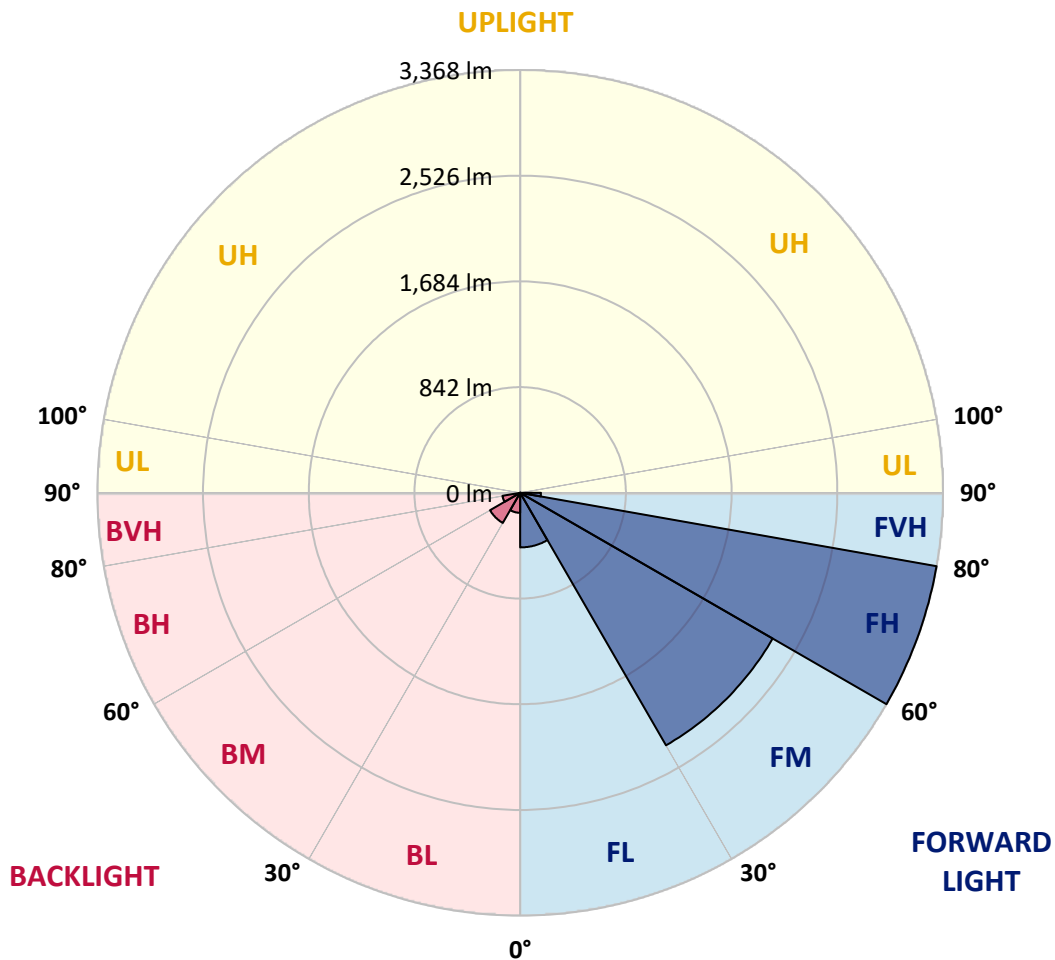
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	435.1	6.3			
FM	(30°-60°)	2322.5	33.8			
FH	(60°-80°)	3368.0	49.0			G2/5000
FVH	(80°-90°)	165.9	2.4			G2/225
BL	(0°-30°)	159.2	2.3	B1/500		
BM	(30°-60°)	277.0	4.0	B1/1000		
BH	(60°-80°)	142.8	2.1	B1/500		G1/500
BVH	(80°-90°)	0.4	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9
2.5°	815.1	813.8	810.0	803.7	797.3	791.0	789.7	779.6	768.2	759.3	751.7
5°	887.3	886.1	879.7	865.8	851.8	835.3	834.1	810.0	788.4	764.4	744.1
7.5°	962.1	959.6	948.2	926.6	902.5	877.2	874.6	839.1	807.5	775.8	746.6
10°	1020.4	1017.9	1001.4	976.0	943.1	911.4	907.6	870.8	839.1	798.6	759.3
12.5°	1077.5	1072.4	1050.8	1023.0	982.4	952.0	948.2	910.1	872.1	830.3	782.1
15°	1130.7	1124.4	1104.1	1068.6	1025.5	996.3	993.8	953.2	913.9	865.8	812.5
17.5°	1167.5	1164.9	1140.8	1101.5	1059.7	1035.6	1033.1	991.3	952.0	901.3	844.2
20°	1186.5	1186.5	1163.7	1120.6	1082.5	1066.0	1062.2	1023.0	984.9	936.8	877.2
22.5°	1190.3	1194.1	1176.3	1129.4	1101.5	1087.6	1085.1	1050.8	1014.1	969.7	913.9
25°	1197.9	1197.9	1189.0	1138.3	1118.0	1114.2	1113.0	1082.5	1049.6	1005.2	950.7
27.5°	1206.8	1206.8	1200.4	1151.0	1143.4	1142.1	1140.8	1126.9	1100.3	1048.3	993.8
30°	1229.6	1230.8	1225.8	1176.3	1171.3	1185.2	1187.7	1180.1	1147.2	1082.5	1038.2
32.5°	1286.6	1275.2	1261.3	1194.1	1202.9	1220.7	1222.0	1206.8	1171.3	1119.3	1091.4
35°	1429.8	1362.7	1299.3	1209.3	1213.1	1230.8	1233.4	1232.1	1210.6	1166.2	1152.2
37.5°	1562.9	1467.9	1377.9	1244.8	1232.1	1251.1	1256.2	1277.7	1261.3	1230.8	1234.6
40°	1640.3	1603.5	1540.1	1342.4	1270.1	1299.3	1304.4	1337.3	1331.0	1318.3	1342.4
42.5°	1878.6	1881.1	1812.7	1488.2	1339.9	1386.8	1393.1	1419.7	1428.6	1434.9	1493.2
45°	2154.9	2163.8	2147.3	1750.6	1471.7	1486.9	1495.8	1531.3	1564.2	1604.8	1711.3
47.5°	2487.0	2479.4	2418.6	2071.3	1701.1	1616.2	1622.5	1691.0	1748.0	1836.7	1988.9
50°	2781.1	2800.1	2684.8	2370.4	2024.4	1820.3	1813.9	1881.1	1983.8	2108.0	2299.4
52.5°	3077.7	3049.8	2893.9	2667.0	2407.2	2097.9	2078.9	2115.6	2260.1	2407.2	2603.6
55°	3156.3	3158.9	3105.6	2991.5	2726.6	2435.1	2403.4	2400.8	2580.8	2681.0	2923.1
57.5°	3311.0	3317.3	3330.0	3352.8	3227.3	2772.2	2739.3	2703.8	2878.7	2937.0	3243.8
60°	3468.1	3475.8	3553.1	3676.0	3592.4	3136.0	3100.5	3016.9	3114.5	3193.1	3581.0
62.5°	3447.9	3501.1	3725.5	3970.1	3960.0	3535.3	3491.0	3289.4	3351.5	3420.0	3890.3
65°	3113.2	3170.3	3674.8	4051.2	4328.8	3929.6	3857.3	3570.8	3574.6	3657.0	4188.1
67.5°	2814.1	2876.2	3357.9	4017.0	4572.2	4283.2	4208.4	3853.5	3793.9	3930.8	4347.9
70°	2641.7	2703.8	3105.6	3910.5	4640.7	4674.9	4610.3	4176.7	4055.0	4180.5	4169.1
72.5°	2067.5	2165.1	2783.6	3707.7	4714.2	5094.5	5043.8	4586.2	4276.9	3919.4	3174.1
75°	823.9	913.9	1737.9	2983.9	4621.7	5455.7	5416.4	4770.0	3958.7	2798.9	1625.1
77.5°	248.4	266.2	483.0	1475.5	3388.3	4837.2	4824.5	4010.7	2801.4	1299.3	443.7
80°	82.4	91.3	148.3	406.9	1546.5	3022.0	3079.0	2555.5	1272.7	297.9	90.0
82.5°	34.2	38.0	74.8	163.5	547.6	1301.8	1282.8	1144.6	443.7	185.1	33.0
85°	8.9	11.4	34.2	93.8	200.3	448.7	471.5	384.1	251.0	153.4	10.1
87.5°	0.0	0.0	16.5	38.0	90.0	135.6	142.0	116.6	142.0	115.4	5.1
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°	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9	747.9
2.5°	745.3	739.0	727.6	720.0	709.9	707.3	702.2	695.9	694.6	688.3	689.6
5°	732.7	722.5	702.2	688.3	671.8	666.8	657.9	651.5	646.5	637.6	638.9
7.5°	730.1	714.9	687.0	660.4	633.8	614.8	588.2	566.6	548.9	529.9	533.7
10°	739.0	720.0	680.7	643.9	595.8	534.9	465.2	419.6	396.8	373.9	376.5
12.5°	756.8	733.9	683.2	627.5	529.9	425.9	329.6	267.5	251.0	240.8	242.1
15°	783.4	755.5	690.8	595.8	441.1	308.0	219.3	192.7	199.0	202.8	202.8
17.5°	811.3	779.6	697.2	538.7	341.0	215.5	178.7	176.2	185.1	193.9	193.9
20°	845.5	804.9	698.4	466.5	245.9	174.9	168.6	168.6	174.9	185.1	185.1
22.5°	878.4	832.8	687.0	384.1	187.6	162.3	162.3	162.3	166.1	176.2	177.5
25°	917.7	867.0	663.0	296.6	161.0	154.6	154.6	155.9	158.4	167.3	168.6
27.5°	959.6	902.5	622.4	216.8	147.0	145.8	147.0	148.3	149.6	158.4	161.0
30°	1007.7	941.8	570.4	162.3	134.4	134.4	138.2	140.7	140.7	148.3	150.8
32.5°	1063.5	993.8	508.3	134.4	121.7	120.4	126.8	130.6	130.6	136.9	139.4
35°	1133.2	1047.0	433.5	119.2	111.5	109.0	111.5	117.9	120.4	125.5	126.8
37.5°	1225.8	1110.4	353.7	110.3	103.9	98.9	98.9	100.1	105.2	110.3	111.5
40°	1343.7	1180.1	275.1	103.9	96.3	91.3	87.5	86.2	84.9	88.7	91.3
42.5°	1492.0	1258.7	205.4	97.6	90.0	82.4	77.3	72.3	65.9	64.6	65.9
45°	1682.1	1355.1	152.1	92.5	86.2	74.8	65.9	57.0	45.6	41.8	43.1
47.5°	1906.5	1455.2	119.2	87.5	83.7	65.9	54.5	39.3	27.9	25.4	26.6
50°	2144.8	1551.5	101.4	81.1	78.6	57.0	39.3	24.1	16.5	16.5	17.7
52.5°	2347.6	1606.0	92.5	76.1	71.0	46.9	25.4	13.9	10.1	10.1	11.4
55°	2544.1	1635.2	86.2	71.0	60.8	33.0	13.9	8.9	6.3	6.3	6.3
57.5°	2746.9	1647.9	78.6	64.6	48.2	20.3	7.6	5.1	3.8	3.8	3.8
60°	2926.9	1623.8	67.2	53.2	31.7	10.1	3.8	3.8	2.5	1.3	1.3
62.5°	3077.7	1578.2	46.9	38.0	19.0	5.1	2.5	1.3	0.0	0.0	0.0
65°	3170.3	1504.6	30.4	25.4	11.4	3.8	1.3	0.0	0.0	0.0	0.0
67.5°	3143.6	1366.5	19.0	16.5	5.1	2.5	1.3	0.0	0.0	0.0	0.0
70°	2836.9	1120.6	13.9	10.1	3.8	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	2044.6	758.0	10.1	6.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	983.7	270.0	6.3	5.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	240.8	59.6	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	53.2	11.4	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.7	5.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	1.3	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)