

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: P398055

Luminaire Tested: **ARCH-S-PA1-80-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398055
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-PA1-80-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1050mA 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: 6981 lumens
Efficiency: N/A
Efficacy: 84.1 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

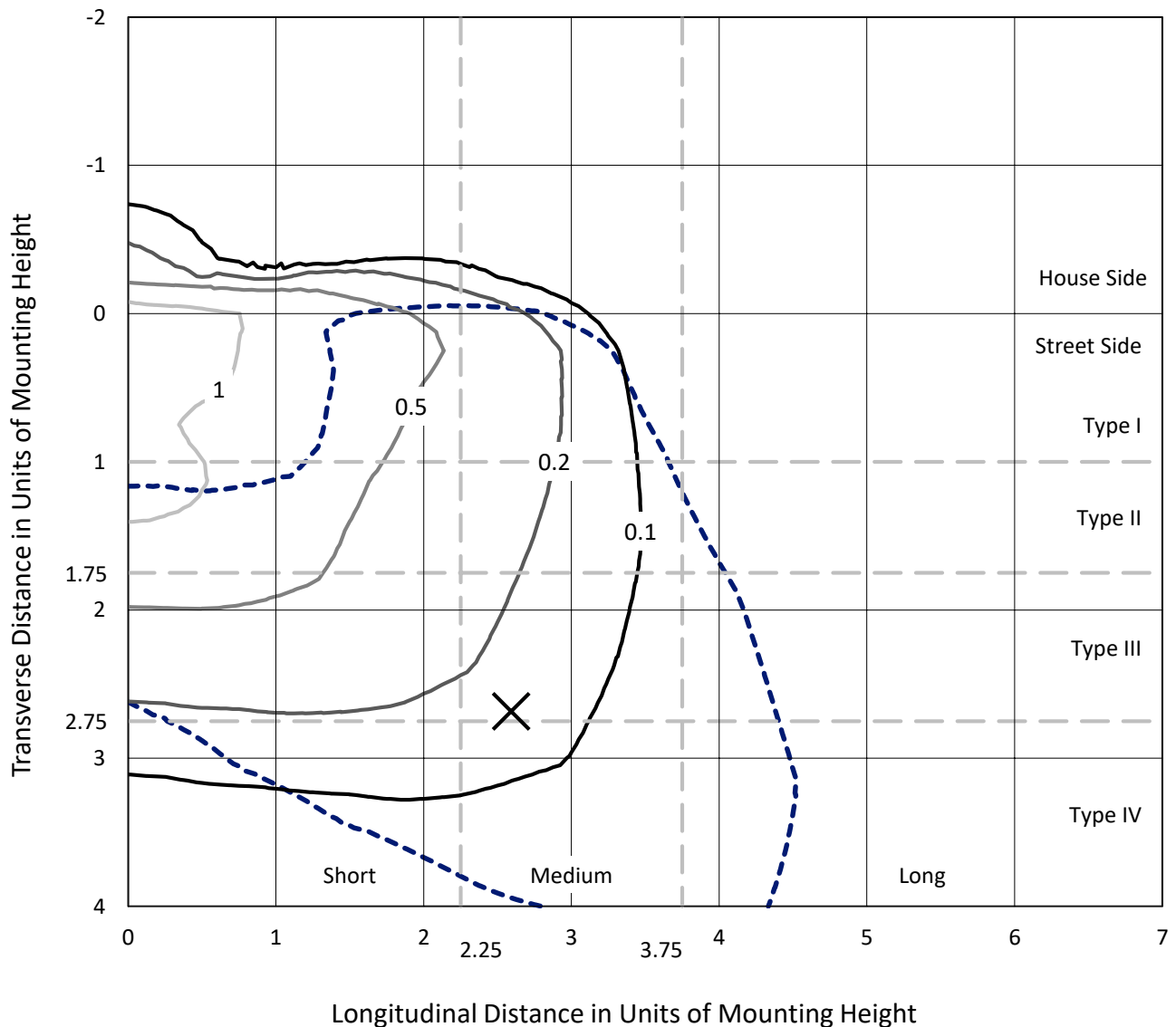
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398055
 CATALOG NUMBER: ARCH-S-PA1-80-730-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

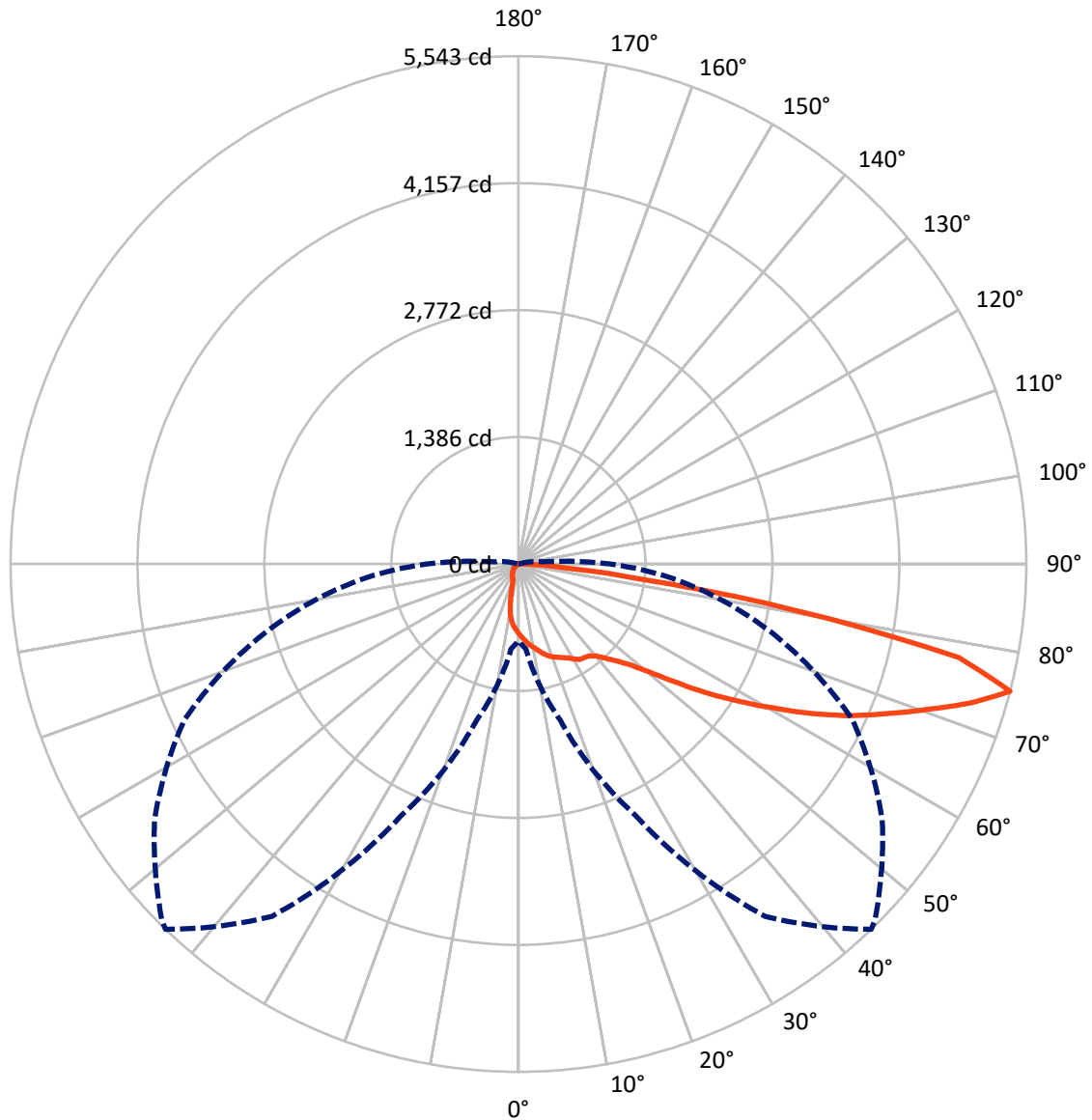
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P398055
CATALOG NUMBER: ARCH-S-PA1-80-730-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P398055

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T4W-HSS

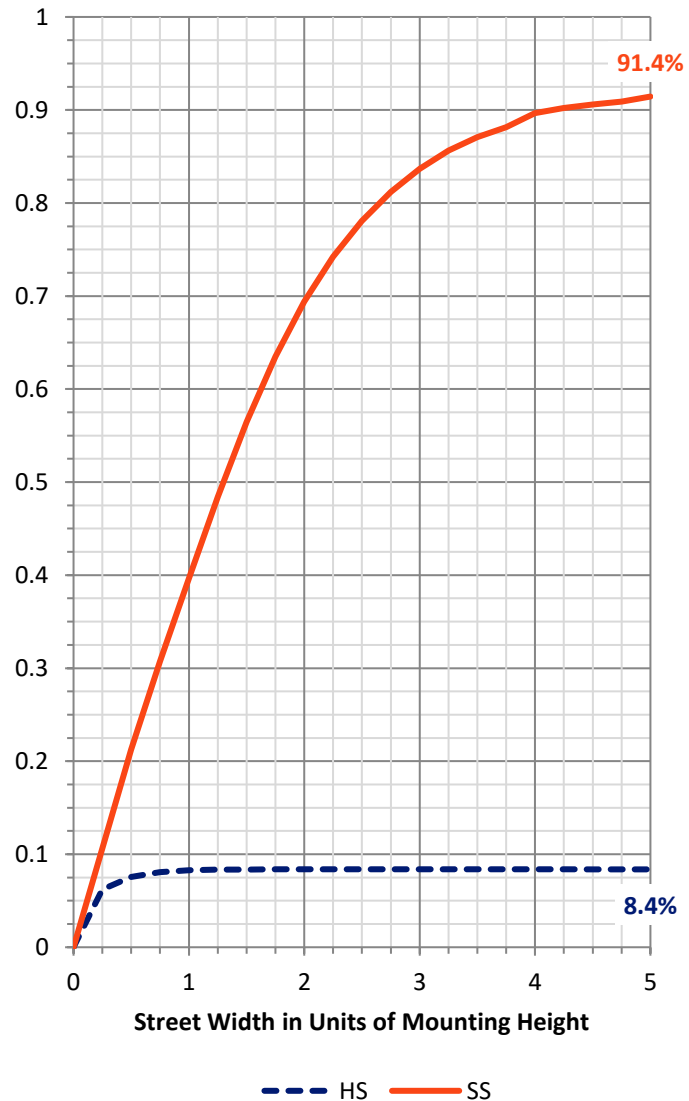
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	588.7	0.0	588.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	6392.3	0.0	6392.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	6981.0	0.0	6981.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.0
10°-20°	200.8	2.9
20°-30°	331.4	4.7
30°-40°	481.0	6.9
40°-50°	781.8	11.2
50°-60°	1378.3	19.7
60°-70°	1980.9	28.4
70°-80°	1586.2	22.7
80°-90°	169.0	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°	6981.0	100.0
0°-180°	6981.0	100.0



REPORT NUMBER: P398055

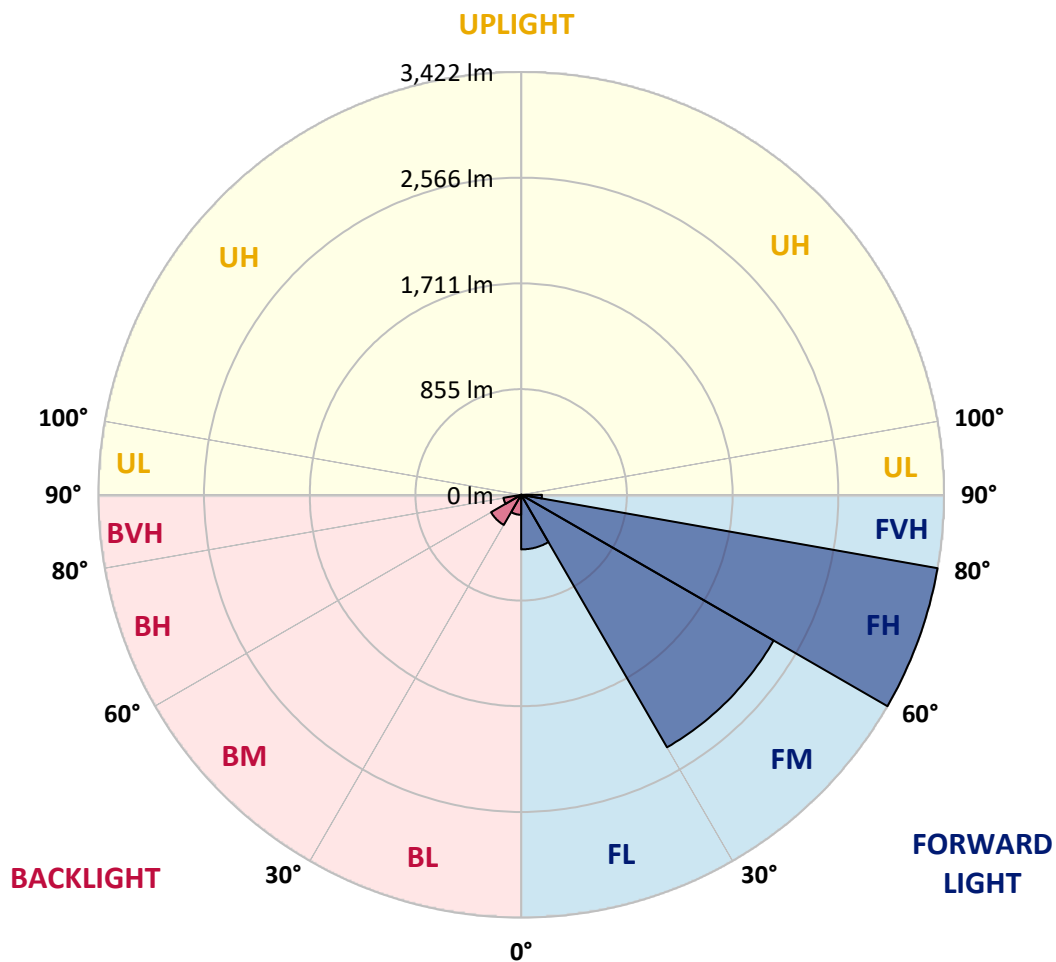
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	442.1	6.3			
FM	(30°-60°)	2359.6	33.8			
FH	(60°-80°)	3422.0	49.0			G2/5000
FVH	(80°-90°)	168.6	2.4			G2/225
BL	(0°-30°)	161.7	2.3	B1/500		
BM	(30°-60°)	281.4	4.0	B1/1000		
BH	(60°-80°)	145.1	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





REPORT NUMBER: P398055

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9
2.5°	828.1	826.8	823.0	816.5	810.1	803.6	802.4	792.1	780.5	771.4	763.7
5°	901.5	900.2	893.8	879.6	865.5	848.7	847.4	823.0	801.1	776.6	756.0
7.5°	977.5	974.9	963.3	941.4	917.0	891.2	888.6	852.6	820.4	788.2	758.6
10°	1036.8	1034.2	1017.4	991.7	958.2	926.0	922.1	884.8	852.6	811.4	771.4
12.5°	1094.7	1089.6	1067.7	1039.3	998.1	967.2	963.3	924.7	886.1	843.6	794.6
15°	1148.8	1142.4	1121.8	1085.7	1041.9	1012.3	1009.7	968.5	928.6	879.6	825.5
17.5°	1186.1	1183.6	1159.1	1119.2	1076.7	1052.2	1049.6	1007.1	967.2	915.7	857.7
20°	1205.5	1205.5	1182.3	1138.5	1099.9	1083.1	1079.3	1039.3	1000.7	951.8	891.2
22.5°	1209.3	1213.2	1195.2	1147.5	1119.2	1105.0	1102.4	1067.7	1030.3	985.2	928.6
25°	1217.1	1217.1	1208.0	1156.5	1135.9	1132.1	1130.8	1099.9	1066.4	1021.3	965.9
27.5°	1226.1	1226.1	1219.6	1169.4	1161.7	1160.4	1159.1	1144.9	1117.9	1065.1	1009.7
30°	1249.3	1250.5	1245.4	1195.2	1190.0	1204.2	1206.8	1199.0	1165.5	1099.9	1054.8
32.5°	1307.2	1295.6	1281.5	1213.2	1222.2	1240.2	1241.5	1226.1	1190.0	1137.2	1108.9
35°	1452.7	1384.5	1320.1	1228.6	1232.5	1250.5	1253.1	1251.8	1229.9	1184.9	1170.7
37.5°	1588.0	1491.4	1399.9	1264.7	1251.8	1271.1	1276.3	1298.2	1281.5	1250.5	1254.4
40°	1666.5	1629.2	1564.8	1363.9	1290.5	1320.1	1325.2	1358.7	1352.3	1339.4	1363.9
42.5°	1908.7	1911.2	1841.7	1512.0	1361.3	1409.0	1415.4	1442.4	1451.5	1457.9	1517.1
45°	2189.4	2198.4	2181.7	1778.6	1495.2	1510.7	1519.7	1555.8	1589.3	1630.5	1738.7
47.5°	2526.8	2519.1	2457.3	2104.4	1728.3	1642.1	1648.5	1718.0	1776.0	1866.2	2020.7
50°	2825.6	2845.0	2727.8	2408.4	2056.8	1849.4	1843.0	1911.2	2015.5	2141.8	2336.2
52.5°	3127.0	3098.7	2940.3	2709.7	2445.7	2131.5	2112.1	2149.5	2296.3	2445.7	2645.3
55°	3206.8	3209.4	3155.3	3039.4	2770.3	2474.0	2441.8	2439.3	2622.1	2723.9	2969.9
57.5°	3364.0	3370.4	3383.3	3406.5	3279.0	2816.6	2783.1	2747.1	2924.8	2984.0	3295.7
60°	3523.7	3531.4	3610.0	3734.9	3649.9	3186.2	3150.2	3065.2	3164.3	3244.2	3638.3
62.5°	3503.1	3557.2	3785.1	4033.7	4023.4	3591.9	3546.9	3342.1	3405.2	3474.7	3952.5
65°	3163.1	3221.0	3733.6	4116.1	4398.1	3992.5	3919.1	3628.0	3631.9	3715.6	4255.2
67.5°	2859.1	2922.2	3411.6	4081.3	4645.4	4351.8	4275.8	3915.2	3854.7	3993.7	4417.5
70°	2684.0	2747.1	3155.3	3973.1	4715.0	4749.7	4684.1	4243.6	4120.0	4247.5	4235.9
72.5°	2100.5	2199.7	2828.2	3767.1	4789.7	5176.0	5124.5	4659.6	4345.3	3982.2	3224.9
75°	837.1	928.6	1765.7	3031.7	4695.6	5543.1	5503.2	4846.3	4022.1	2843.7	1651.1
77.5°	252.4	270.5	490.7	1499.1	3442.5	4914.6	4901.7	4074.9	2846.2	1320.1	450.8
80°	83.7	92.7	150.7	413.4	1571.2	3070.3	3128.3	2596.4	1293.0	302.7	91.4
82.5°	34.8	38.6	76.0	166.1	556.4	1322.7	1303.3	1163.0	450.8	188.0	33.5
85°	9.0	11.6	34.8	95.3	203.5	455.9	479.1	390.2	255.0	155.8	10.3
87.5°	0.0	0.0	16.7	38.6	91.4	137.8	144.2	118.5	144.2	117.2	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P398055

CATALOG NUMBER: ARCH-S-PA1-80-730-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9
2.5°	757.3	750.8	739.2	731.5	721.2	718.6	713.5	707.1	705.8	699.3	700.6
5°	744.4	734.1	713.5	699.3	682.6	677.4	668.4	662.0	656.8	647.8	649.1
7.5°	741.8	726.4	698.0	671.0	643.9	624.6	597.6	575.7	557.7	538.3	542.2
10°	750.8	731.5	691.6	654.2	605.3	543.5	472.7	426.3	403.1	379.9	382.5
12.5°	768.9	745.7	694.2	637.5	538.3	432.7	334.9	271.7	255.0	244.7	246.0
15°	795.9	767.6	701.9	605.3	448.2	313.0	222.8	195.8	202.2	206.1	206.1
17.5°	824.2	792.1	708.3	547.4	346.4	218.9	181.6	179.0	188.0	197.0	197.0
20°	859.0	817.8	709.6	473.9	249.9	177.7	171.3	171.3	177.7	188.0	188.0
22.5°	892.5	846.1	698.0	390.2	190.6	164.8	164.8	164.8	168.7	179.0	180.3
25°	932.4	880.9	673.6	301.4	163.6	157.1	157.1	158.4	161.0	170.0	171.3
27.5°	974.9	917.0	632.4	220.2	149.4	148.1	149.4	150.7	152.0	161.0	163.6
30°	1023.9	956.9	579.6	164.8	136.5	136.5	140.4	143.0	143.0	150.7	153.3
32.5°	1080.5	1009.7	516.4	136.5	123.6	122.3	128.8	132.7	132.7	139.1	141.7
35°	1151.4	1063.8	440.5	121.1	113.3	110.8	113.3	119.8	122.3	127.5	128.8
37.5°	1245.4	1128.2	359.3	112.0	105.6	100.5	100.5	101.7	106.9	112.0	113.3
40°	1365.2	1199.0	279.5	105.6	97.9	92.7	88.9	87.6	86.3	90.2	92.7
42.5°	1515.8	1278.9	208.6	99.2	91.4	83.7	78.6	73.4	67.0	65.7	67.0
45°	1709.0	1376.8	154.5	94.0	87.6	76.0	67.0	58.0	46.4	42.5	43.8
47.5°	1937.0	1478.5	121.1	88.9	85.0	67.0	55.4	39.9	28.3	25.8	27.0
50°	2179.1	1576.4	103.0	82.4	79.8	58.0	39.9	24.5	16.7	16.7	18.0
52.5°	2385.2	1631.8	94.0	77.3	72.1	47.7	25.8	14.2	10.3	10.3	11.6
55°	2584.8	1661.4	87.6	72.1	61.8	33.5	14.2	9.0	6.4	6.4	6.4
57.5°	2790.9	1674.3	79.8	65.7	48.9	20.6	7.7	5.2	3.9	3.9	3.9
60°	2973.7	1649.8	68.3	54.1	32.2	10.3	3.9	3.9	2.6	1.3	1.3
62.5°	3127.0	1603.4	47.7	38.6	19.3	5.2	2.6	1.3	0.0	0.0	0.0
65°	3221.0	1528.7	30.9	25.8	11.6	3.9	1.3	0.0	0.0	0.0	0.0
67.5°	3194.0	1388.3	19.3	16.7	5.2	2.6	1.3	0.0	0.0	0.0	0.0
70°	2882.3	1138.5	14.2	10.3	3.9	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	2077.4	770.2	10.3	6.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	999.4	274.3	6.4	5.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	244.7	60.5	3.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.1	11.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.0	5.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	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)