

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: P397864

Luminaire Tested: **ARCH-S-PA1-50-760-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-760-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 670mA LIGHT ENGINE 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: 5643 lumens  
Efficiency: N/A  
Efficacy: 104.5 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): 54  
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

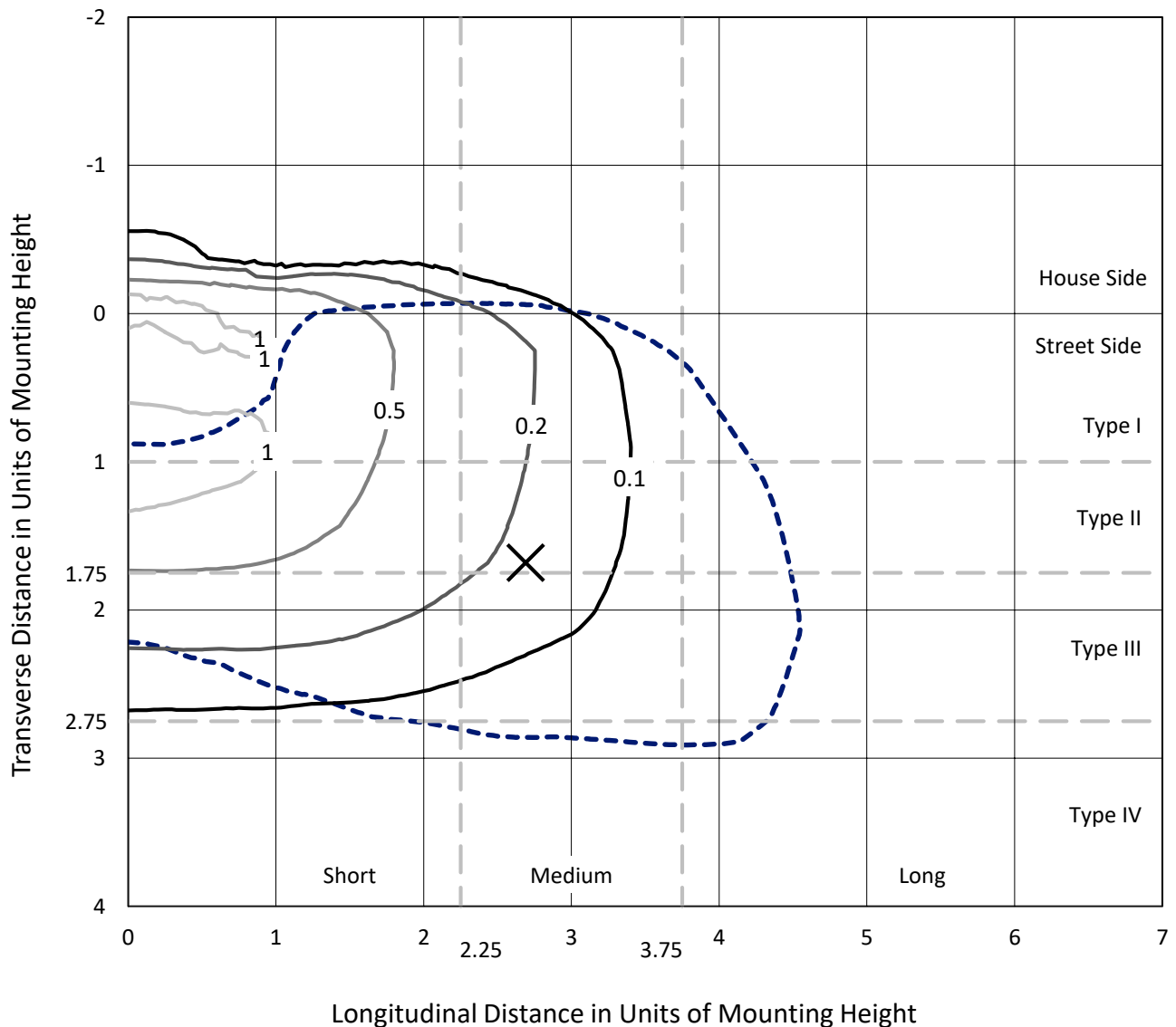


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

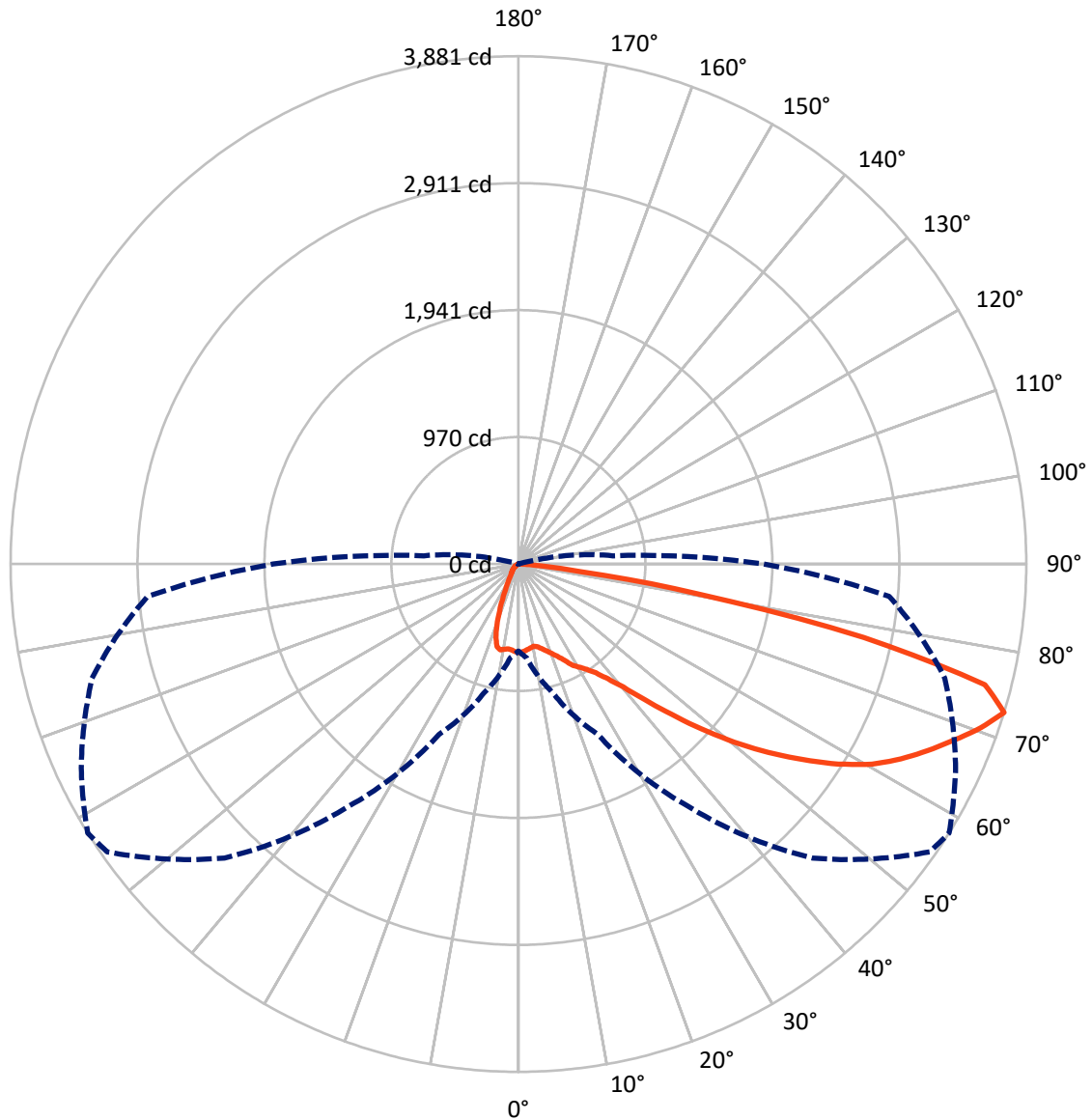


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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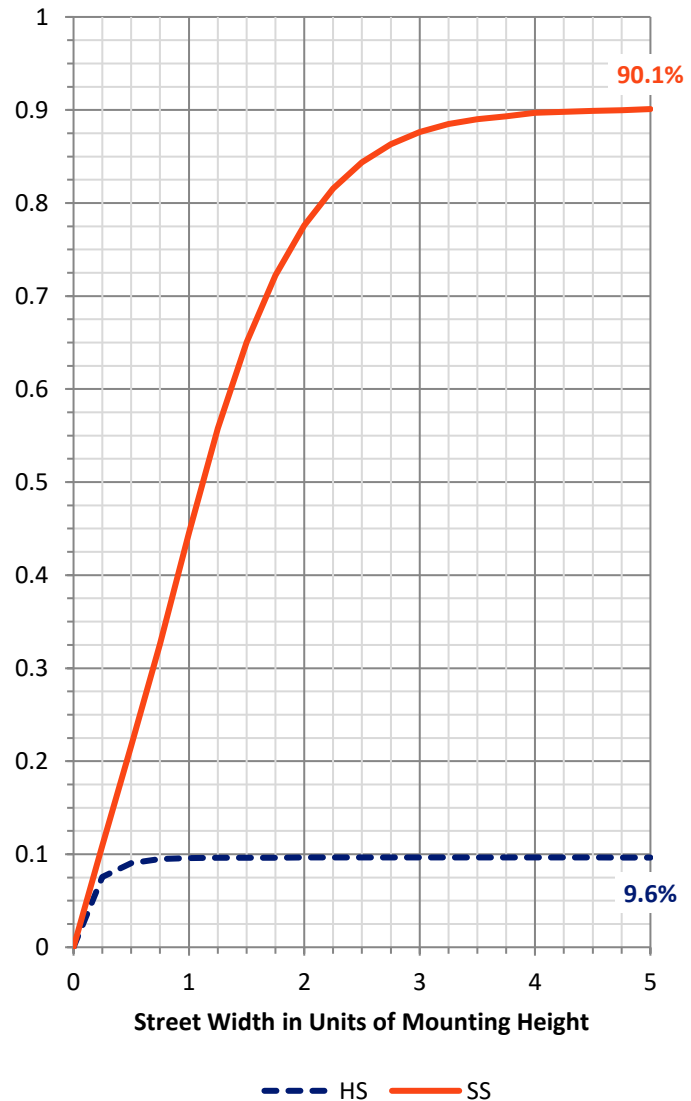
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	548.7	0.0	548.7
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	5094.3	0.0	5094.3
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	5643.0	0.0	5643.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.1	1.1
10°-20°	161.9	2.9
20°-30°	254.3	4.5
30°-40°	438.5	7.8
40°-50°	834.3	14.8
50°-60°	1321.2	23.4
60°-70°	1541.7	27.3
70°-80°	965.6	17.1
80°-90°	63.4	1.1
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°	5643.0	100.0
0°-180°	5643.0	100.0



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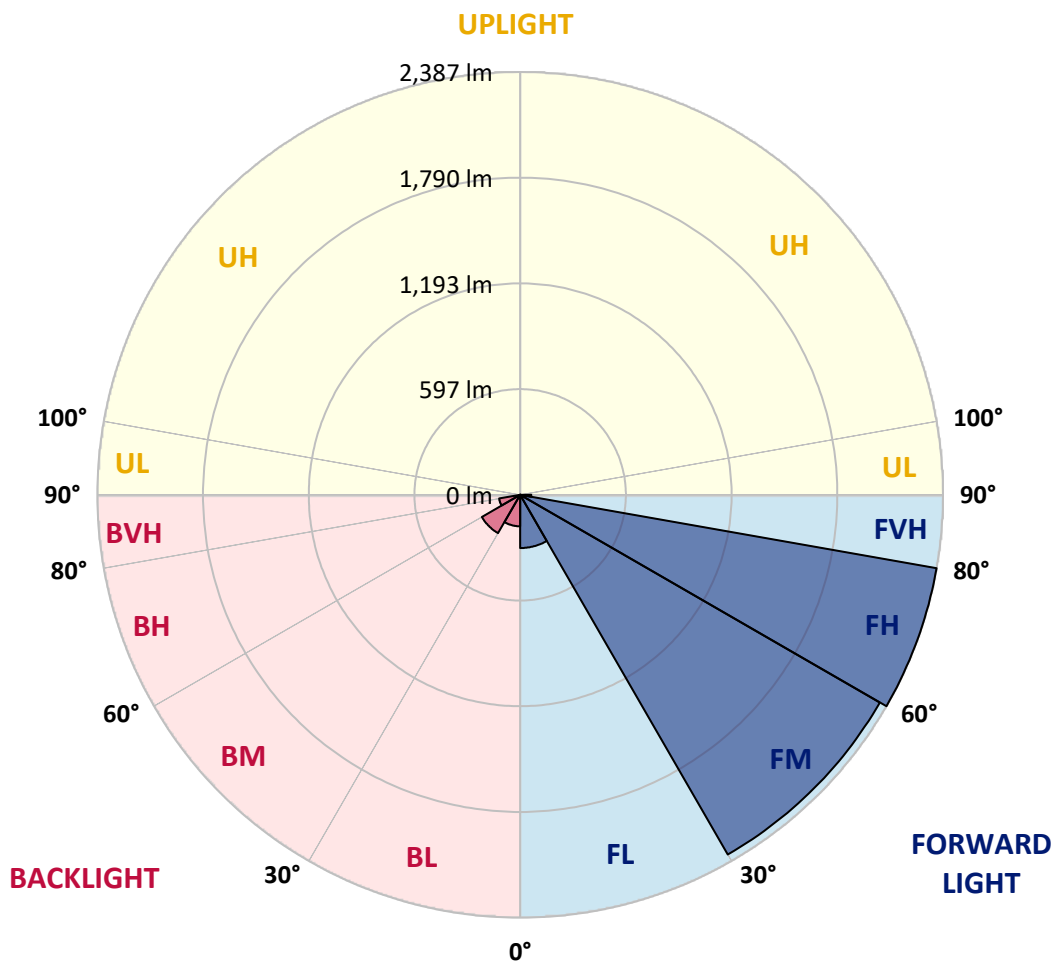
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	300.6	5.3			
FM	(30°-60°)	2344.3	41.5			
FH	(60°-80°)	2386.6	42.3			G2/5000
FVH	(80°-90°)	62.8	1.1			G1/100
BL	(0°-30°)	177.7	3.1	B1/500		
BM	(30°-60°)	249.7	4.4	B1/1000		
BH	(60°-80°)	120.7	2.1	B1/500		G1/500
BVH	(80°-90°)	0.6	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°	45°	55°	58°	65°	75°	85°
0°	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1
2.5°	674.1	671.1	670.1	669.1	670.1	671.1	668.0	671.1	669.1	670.1	672.1
5°	649.9	646.9	645.8	646.9	649.9	654.9	656.9	660.0	660.0	663.0	664.0
7.5°	622.6	620.6	619.6	621.6	627.7	638.8	644.8	648.9	652.9	659.0	665.0
10°	607.5	606.5	605.5	608.5	614.6	624.7	632.7	638.8	653.9	671.1	682.2
12.5°	597.4	597.4	599.4	605.5	613.6	621.6	640.8	648.9	672.1	698.3	713.5
15°	589.3	589.3	592.4	603.5	614.6	633.7	662.0	671.1	698.3	730.6	750.8
17.5°	583.3	585.3	587.3	598.4	619.6	651.9	685.2	698.3	731.6	766.9	789.1
20°	584.3	586.3	587.3	598.4	628.7	673.1	715.5	730.6	769.0	806.3	828.5
22.5°	590.3	593.4	594.4	609.5	644.8	695.3	749.8	766.9	808.3	847.7	864.8
25°	615.6	617.6	611.5	624.7	668.0	729.6	794.2	812.3	853.7	890.1	904.2
27.5°	701.3	703.4	670.1	654.9	686.2	757.9	848.7	873.9	925.4	949.6	951.6
30°	887.0	889.0	823.4	751.8	729.6	782.1	879.0	914.3	980.9	1008.1	996.0
32.5°	1126.2	1124.2	1034.4	928.4	832.5	824.5	922.3	959.7	1032.3	1058.6	1049.5
35°	1366.4	1369.4	1292.7	1133.3	996.0	904.2	977.8	1021.2	1109.0	1146.4	1130.2
37.5°	1530.8	1551.0	1517.7	1345.2	1196.8	1051.5	1067.7	1114.1	1224.1	1274.5	1240.2
40°	1762.9	1757.9	1677.2	1550.0	1418.8	1269.5	1213.0	1235.2	1361.3	1428.9	1375.4
42.5°	2074.8	2064.7	1927.4	1803.3	1657.0	1534.9	1419.8	1415.8	1518.7	1597.5	1519.7
45°	2357.3	2342.2	2248.3	2128.3	1967.8	1827.5	1672.1	1636.8	1708.5	1775.1	1684.2
47.5°	2582.4	2557.1	2490.5	2427.0	2387.6	2169.6	1936.5	1883.0	1919.4	1968.8	1840.7
50°	2848.8	2779.1	2682.3	2643.9	2725.7	2557.1	2190.8	2139.4	2137.3	2165.6	2002.1
52.5°	2969.9	2843.7	2789.2	2821.5	2965.8	2917.4	2465.3	2391.6	2362.4	2365.4	2152.5
55°	2823.5	2809.4	2838.7	2939.6	3128.3	3100.0	2728.7	2637.9	2594.5	2540.0	2296.8
57.5°	2657.0	2700.4	2816.5	3009.2	3334.2	3290.8	2988.0	2885.1	2805.4	2680.2	2457.2
60°	2503.6	2548.1	2739.8	3025.4	3447.2	3474.4	3204.0	3106.1	2988.0	2823.5	2633.8
62.5°	2270.5	2304.9	2574.3	3002.2	3397.7	3581.4	3354.3	3280.7	3170.7	2959.8	2836.7
65°	2008.2	2030.4	2296.8	2816.5	3300.9	3569.3	3478.5	3437.1	3330.1	3102.1	3037.5
67.5°	1720.6	1746.8	1968.8	2482.5	3111.1	3512.8	3595.5	3591.5	3469.4	3259.5	3182.8
70°	1389.6	1391.6	1575.3	2058.6	2780.2	3399.8	3740.8	3749.9	3602.6	3377.6	3188.8
72.5°	665.0	719.5	1021.2	1437.0	2259.4	3177.7	3835.7	3881.1	3686.3	3373.5	2844.7
75°	152.4	157.4	297.7	683.2	1325.0	2439.1	3598.6	3683.3	3482.5	2917.4	2004.1
77.5°	55.5	58.5	83.8	199.8	509.6	1260.4	2575.3	2699.4	2574.3	1886.1	947.6
80°	37.3	36.3	43.4	88.8	234.1	357.2	1316.9	1390.6	1269.5	643.8	227.1
82.5°	19.2	20.2	30.3	49.4	157.4	124.1	440.0	478.3	393.6	129.2	42.4
85°	9.1	9.1	17.2	31.3	66.6	43.4	97.9	118.1	106.0	56.5	14.1
87.5°	9.1	9.1	16.1	20.2	34.3	18.2	24.2	30.3	28.3	30.3	5.0
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°	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1	677.1
2.5°	672.1	671.1	670.1	672.1	671.1	673.1	673.1	675.1	675.1	673.1	672.1
5°	663.0	661.0	659.0	659.0	658.0	660.0	666.0	671.1	672.1	669.1	668.0
7.5°	664.0	664.0	662.0	658.0	650.9	650.9	650.9	656.9	660.0	658.0	656.9
10°	682.2	683.2	678.1	669.1	656.9	645.8	624.7	593.4	564.1	556.0	553.0
12.5°	713.5	714.5	704.4	688.2	663.0	597.4	516.7	442.0	384.5	368.3	365.3
15°	750.8	751.8	733.6	707.4	630.7	478.3	358.2	273.5	223.0	210.9	209.9
17.5°	789.1	787.1	759.9	709.4	534.8	339.1	218.0	174.6	161.5	158.4	159.4
20°	826.5	820.4	783.1	672.1	411.7	222.0	159.4	149.4	146.3	144.3	144.3
22.5°	860.8	848.7	802.3	598.4	288.6	159.4	142.3	140.3	136.2	133.2	132.2
25°	895.1	877.9	814.4	502.5	193.8	139.3	134.2	130.2	125.1	121.1	120.1
27.5°	936.5	912.3	808.3	381.5	145.3	129.2	125.1	119.1	112.0	106.0	103.9
30°	975.8	948.6	774.0	263.4	124.1	119.1	113.0	103.9	94.9	87.8	85.8
32.5°	1025.3	994.0	712.4	172.6	108.0	103.9	97.9	86.8	74.7	66.6	64.6
35°	1095.9	1060.6	633.7	121.1	94.9	87.8	79.7	67.6	54.5	48.4	47.4
37.5°	1194.8	1147.4	534.8	97.9	83.8	73.7	61.6	49.4	40.4	35.3	34.3
40°	1315.9	1243.2	424.8	86.8	74.7	61.6	46.4	35.3	29.3	25.2	25.2
42.5°	1447.1	1333.1	312.8	79.7	65.6	50.5	34.3	25.2	21.2	19.2	18.2
45°	1582.3	1412.8	210.9	73.7	57.5	38.3	24.2	17.2	14.1	14.1	13.1
47.5°	1722.6	1466.3	136.2	66.6	48.4	28.3	16.1	12.1	10.1	10.1	10.1
50°	1861.8	1494.5	96.9	60.5	39.4	19.2	12.1	9.1	8.1	8.1	8.1
52.5°	1962.8	1476.4	77.7	52.5	30.3	14.1	9.1	7.1	6.1	6.1	6.1
55°	2050.6	1445.1	67.6	45.4	22.2	10.1	7.1	6.1	5.0	5.0	5.0
57.5°	2140.4	1404.7	60.5	38.3	16.1	7.1	5.0	4.0	4.0	4.0	4.0
60°	2222.1	1336.1	52.5	30.3	11.1	5.0	4.0	3.0	3.0	3.0	3.0
62.5°	2301.8	1277.6	45.4	23.2	8.1	4.0	2.0	2.0	1.0	1.0	1.0
65°	2347.2	1198.8	36.3	15.1	5.0	3.0	1.0	1.0	0.0	0.0	0.0
67.5°	2333.1	1105.0	25.2	9.1	3.0	2.0	1.0	0.0	0.0	0.0	0.0
70°	2235.2	978.9	15.1	5.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0
72.5°	1871.9	724.6	9.1	4.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	1250.3	333.0	5.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	572.2	99.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.0	26.2	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.2	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.0	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)