

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: P397554

Luminaire Tested: **ARCH-S-PA1-100-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397554  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-100-740-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9133 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

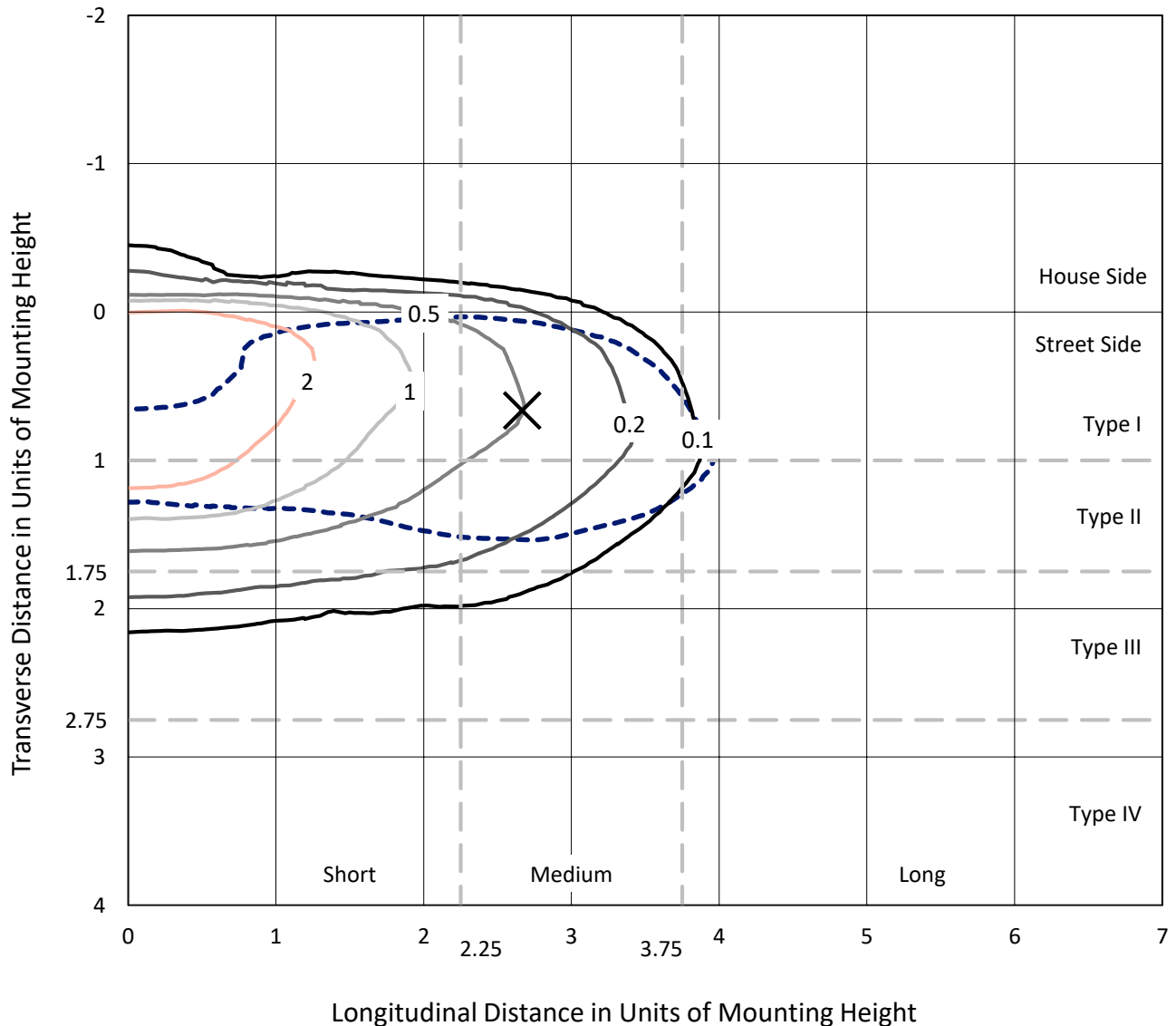


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### Iso-Footcandle Lines of Horizontal Illumination

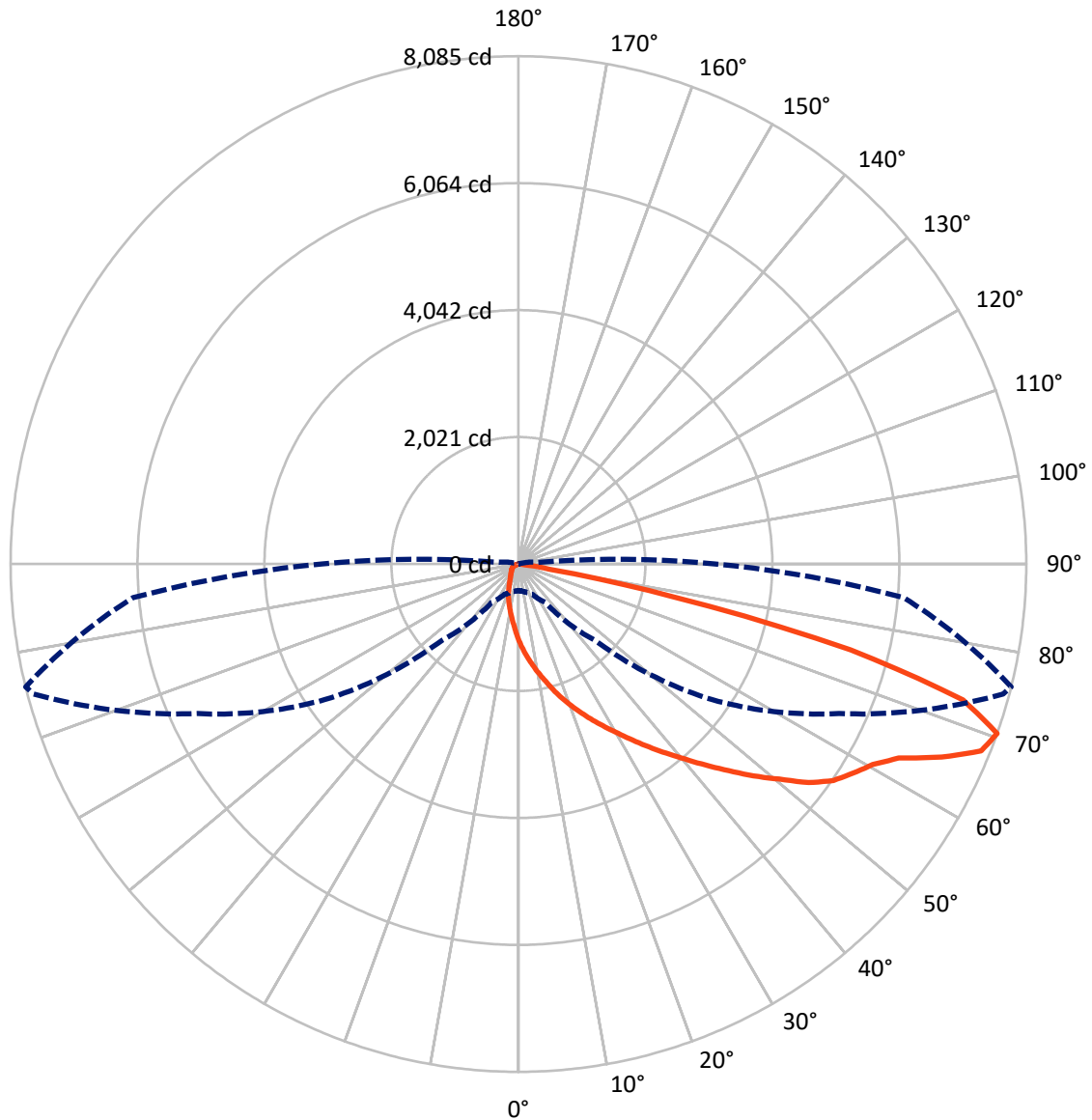
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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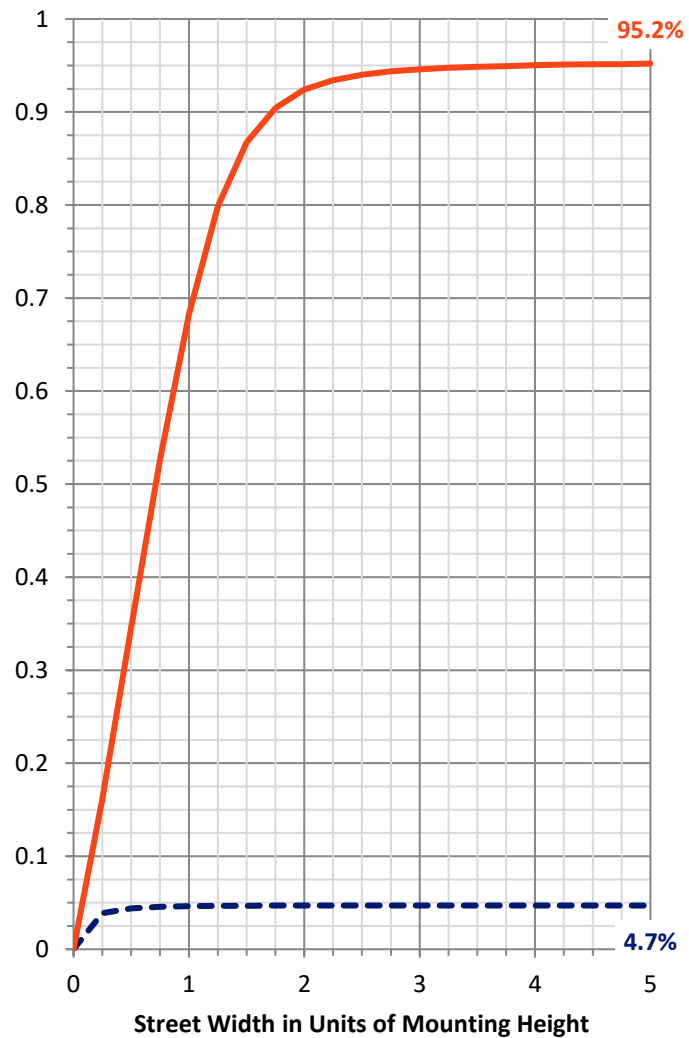
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	430.7	0.0	430.7
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	8702.3	0.0	8702.3
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	9133.0	0.0	9133.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.2	1.3
10°-20°	371.7	4.1
20°-30°	692.3	7.6
30°-40°	1224.5	13.4
40°-50°	1872.5	20.5
50°-60°	2122.9	23.2
60°-70°	1819.9	19.9
70°-80°	881.4	9.7
80°-90°	32.7	0.4
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°	9133.0	100.0
0°-180°	9133.0	100.0



--- HS    — SS

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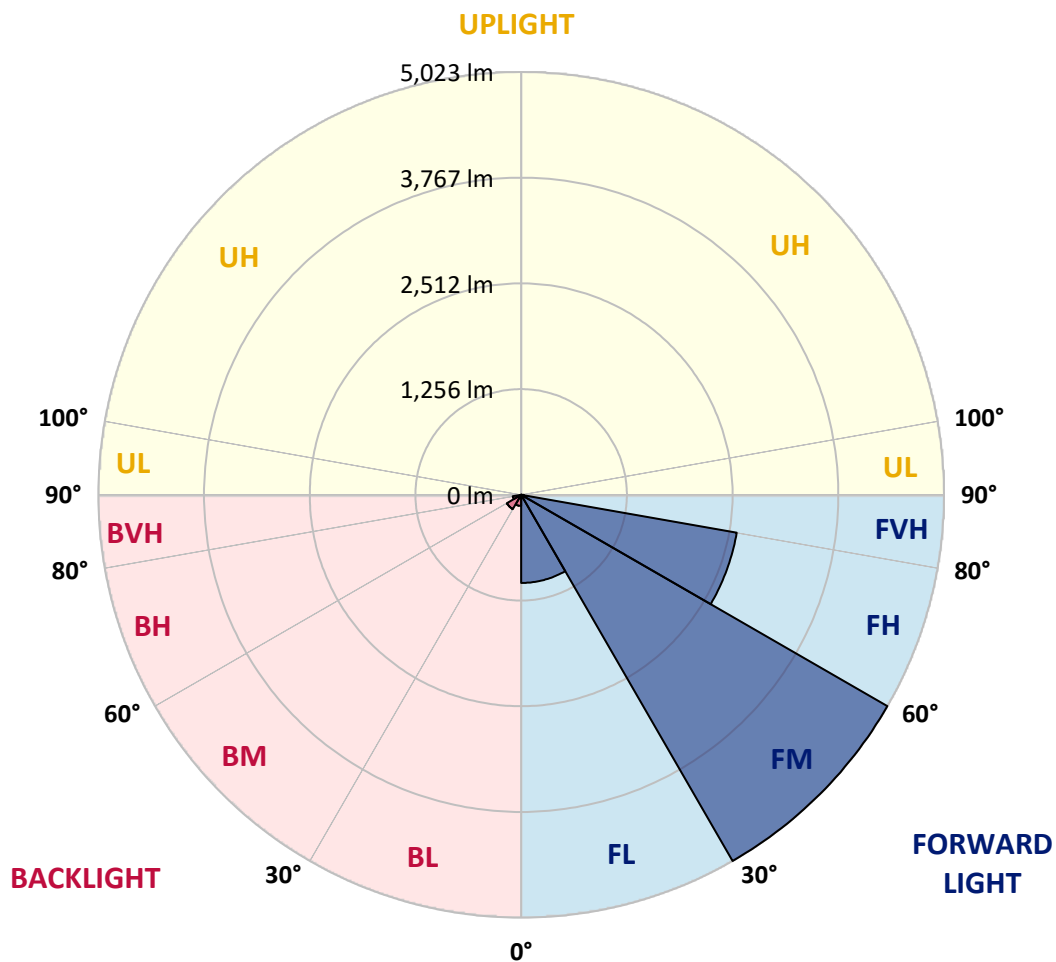
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1047.0	11.5			
FM	(30°-60°)	5023.2	55.0			
FH	(60°-80°)	2599.9	28.5			G2/5000
FVH	(80°-90°)	32.1	0.4			G1/100
BL	(0°-30°)	132.1	1.4	B1/500		
BM	(30°-60°)	196.6	2.2	B0/220		
BH	(60°-80°)	101.4	1.1	B0/110		G0/110
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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5
2.5°	1671.1	1661.9	1652.8	1617.8	1585.9	1557.0	1502.3	1430.8	1367.0	1353.3	1278.8
5°	1963.0	1952.4	1938.7	1903.7	1862.7	1814.0	1733.4	1623.9	1511.4	1487.1	1348.7
7.5°	2160.7	2151.6	2131.8	2115.1	2074.0	2026.9	1937.2	1809.4	1654.3	1623.9	1429.3
10°	2296.0	2289.9	2286.9	2273.2	2242.8	2204.8	2115.1	1981.3	1798.8	1763.8	1514.5
12.5°	2344.7	2344.7	2359.9	2382.7	2387.2	2375.1	2293.0	2159.2	1950.8	1914.4	1614.8
15°	2279.3	2286.9	2320.3	2393.3	2469.3	2519.5	2467.8	2343.1	2118.1	2078.6	1733.4
17.5°	2261.0	2268.6	2291.4	2355.3	2457.2	2591.0	2616.8	2521.0	2276.2	2242.8	1855.1
20°	2312.7	2320.3	2340.1	2394.8	2472.4	2607.7	2715.7	2692.9	2443.5	2408.5	1978.2
22.5°	2435.9	2440.5	2440.5	2483.0	2551.5	2651.8	2778.0	2855.6	2615.3	2577.3	2099.9
25°	2700.5	2691.3	2654.9	2633.6	2677.7	2759.8	2857.1	2998.5	2806.9	2755.2	2230.6
27.5°	3047.2	3077.6	2989.4	2887.5	2854.0	2901.2	2968.1	3124.7	2992.4	2937.7	2349.2
30°	3517.0	3504.8	3389.3	3243.3	3098.9	3082.1	3104.9	3232.7	3177.9	3126.2	2481.5
32.5°	3903.2	3926.0	3804.4	3626.5	3410.6	3308.7	3284.4	3361.9	3375.6	3342.1	2638.1
35°	4300.1	4324.4	4205.8	4008.1	3751.2	3580.9	3510.9	3521.6	3620.4	3577.8	2802.3
37.5°	4655.9	4677.2	4560.1	4357.9	4100.9	3892.6	3792.2	3710.1	3857.6	3819.6	2975.7
40°	4926.5	4929.6	4850.5	4669.6	4426.3	4210.4	4096.3	3935.1	4108.5	4082.6	3156.6
42.5°	5118.1	5124.2	5066.4	4911.3	4686.3	4485.6	4392.8	4201.2	4397.4	4374.6	3366.5
45°	5207.8	5218.5	5212.4	5069.5	4882.4	4709.1	4678.7	4484.1	4713.7	4692.4	3608.2
47.5°	5122.7	5122.7	5200.2	5180.5	5008.6	4893.1	4928.1	4779.0	5057.3	5037.5	3854.6
50°	4768.4	4773.0	4931.1	5157.7	5057.3	5031.5	5140.9	5067.9	5369.0	5381.2	4149.5
52.5°	3837.8	3830.2	4363.9	4798.8	5023.8	5093.8	5337.1	5362.9	5743.1	5779.6	4443.0
55°	2867.7	2863.2	3374.1	4163.2	4789.7	5061.9	5446.6	5626.0	6062.4	6085.2	4662.0
57.5°	2270.2	2258.0	2539.3	3355.8	4260.5	4918.9	5451.1	5676.2	6240.3	6279.8	4874.8
60°	1745.6	1734.9	1944.8	2496.7	3510.9	4538.8	5320.4	5679.2	6412.1	6482.0	5160.7
62.5°	1248.4	1260.5	1421.7	1791.2	2700.5	4002.0	5150.1	5721.8	6717.7	6796.8	5566.7
65°	842.4	836.3	970.1	1219.5	1920.4	3279.8	4888.5	5811.5	7268.2	7406.5	6053.3
67.5°	585.4	590.0	650.8	793.7	1219.5	2518.0	4453.6	5861.7	7836.8	7944.8	6393.9
70°	422.7	428.8	462.2	533.7	745.1	1707.6	3764.8	5632.1	7990.4	8084.7	6156.6
72.5°	278.3	290.4	340.6	378.6	475.9	1068.9	2773.5	4852.0	7329.0	7398.9	5165.3
75°	150.5	153.6	219.0	282.8	339.1	666.0	1654.3	3272.2	5483.1	5460.2	3406.0
77.5°	117.1	121.6	135.3	202.2	228.1	366.4	653.8	1478.0	2597.1	2527.1	1161.7
80°	71.5	74.5	94.3	120.1	159.7	212.9	191.6	401.4	527.6	494.2	170.3
82.5°	42.6	45.6	56.3	100.4	126.2	100.4	66.9	97.3	98.8	97.3	42.6
85°	7.6	7.6	39.5	69.9	66.9	28.9	39.5	31.9	28.9	30.4	9.1
87.5°	0.0	0.0	15.2	21.3	30.4	10.6	15.2	7.6	7.6	7.6	4.6
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°	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5	1222.5
2.5°	1233.2	1181.5	1075.0	982.3	889.5	821.1	769.4	716.2	697.9	675.1	663.0
5°	1254.4	1152.6	941.2	772.4	629.5	520.0	450.1	407.5	380.1	360.4	355.8
7.5°	1286.4	1129.8	833.3	605.2	448.6	339.1	281.3	252.4	237.2	228.1	225.0
10°	1324.4	1110.0	726.8	471.4	316.3	238.7	206.8	194.6	188.5	185.5	184.0
12.5°	1377.6	1102.4	637.1	363.4	238.7	196.1	179.4	171.8	167.3	162.7	161.2
15°	1447.5	1105.4	555.0	281.3	197.7	174.9	161.2	153.6	147.5	142.9	142.9
17.5°	1520.5	1110.0	474.4	228.1	179.4	159.7	144.5	133.8	129.2	124.7	123.2
20°	1589.0	1108.5	396.9	194.6	162.7	142.9	127.7	117.1	109.5	104.9	104.9
22.5°	1654.3	1099.3	323.9	174.9	149.0	126.2	109.5	98.8	92.8	88.2	88.2
25°	1724.3	1081.1	264.6	159.7	132.3	111.0	94.3	83.6	79.1	74.5	74.5
27.5°	1779.0	1050.7	215.9	146.0	117.1	95.8	80.6	71.5	66.9	63.9	63.9
30°	1838.3	1006.6	179.4	130.8	101.9	82.1	68.4	60.8	56.3	54.7	54.7
32.5°	1903.7	957.9	153.6	115.6	86.7	69.9	57.8	53.2	48.7	47.1	47.1
35°	1979.7	915.4	138.4	100.4	76.0	59.3	50.2	45.6	42.6	42.6	42.6
37.5°	2066.4	871.3	124.7	88.2	65.4	50.2	42.6	41.1	39.5	38.0	38.0
40°	2160.7	824.1	112.5	77.5	56.3	42.6	36.5	36.5	35.0	35.0	35.0
42.5°	2267.1	783.1	101.9	68.4	48.7	36.5	31.9	31.9	30.4	30.4	30.4
45°	2382.7	745.1	92.8	60.8	42.6	31.9	28.9	27.4	25.8	25.8	25.8
47.5°	2519.5	723.8	85.1	53.2	36.5	27.4	24.3	22.8	21.3	19.8	19.8
50°	2694.4	732.9	77.5	44.1	31.9	22.8	19.8	18.2	16.7	15.2	15.2
52.5°	2832.8	728.3	66.9	38.0	25.8	18.2	15.2	13.7	12.2	10.6	10.6
55°	2933.1	710.1	57.8	31.9	19.8	15.2	12.2	9.1	7.6	7.6	7.6
57.5°	3031.9	691.8	48.7	25.8	15.2	10.6	7.6	6.1	6.1	6.1	6.1
60°	3185.5	666.0	42.6	21.3	12.2	7.6	4.6	4.6	3.0	3.0	3.0
62.5°	3372.5	634.1	35.0	18.2	9.1	6.1	3.0	3.0	0.0	0.0	0.0
65°	3577.8	577.8	28.9	13.7	7.6	4.6	3.0	0.0	0.0	0.0	0.0
67.5°	3530.7	463.8	24.3	9.1	6.1	3.0	1.5	0.0	0.0	0.0	0.0
70°	3123.2	313.2	19.8	7.6	4.6	3.0	1.5	0.0	0.0	0.0	0.0
72.5°	2446.5	185.5	13.7	6.1	3.0	1.5	0.0	0.0	0.0	0.0	0.0
75°	1566.2	92.8	9.1	4.6	3.0	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	524.6	45.6	6.1	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	74.5	15.2	3.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.7	6.1	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.1	3.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.5	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)