

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: P398004

Luminaire Tested: **ARCH-S-PA1-70-760-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398004  
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-PA1-70-760-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5700K, 930mA 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: 7804 lumens  
Efficiency: N/A  
Efficacy: 105.5 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

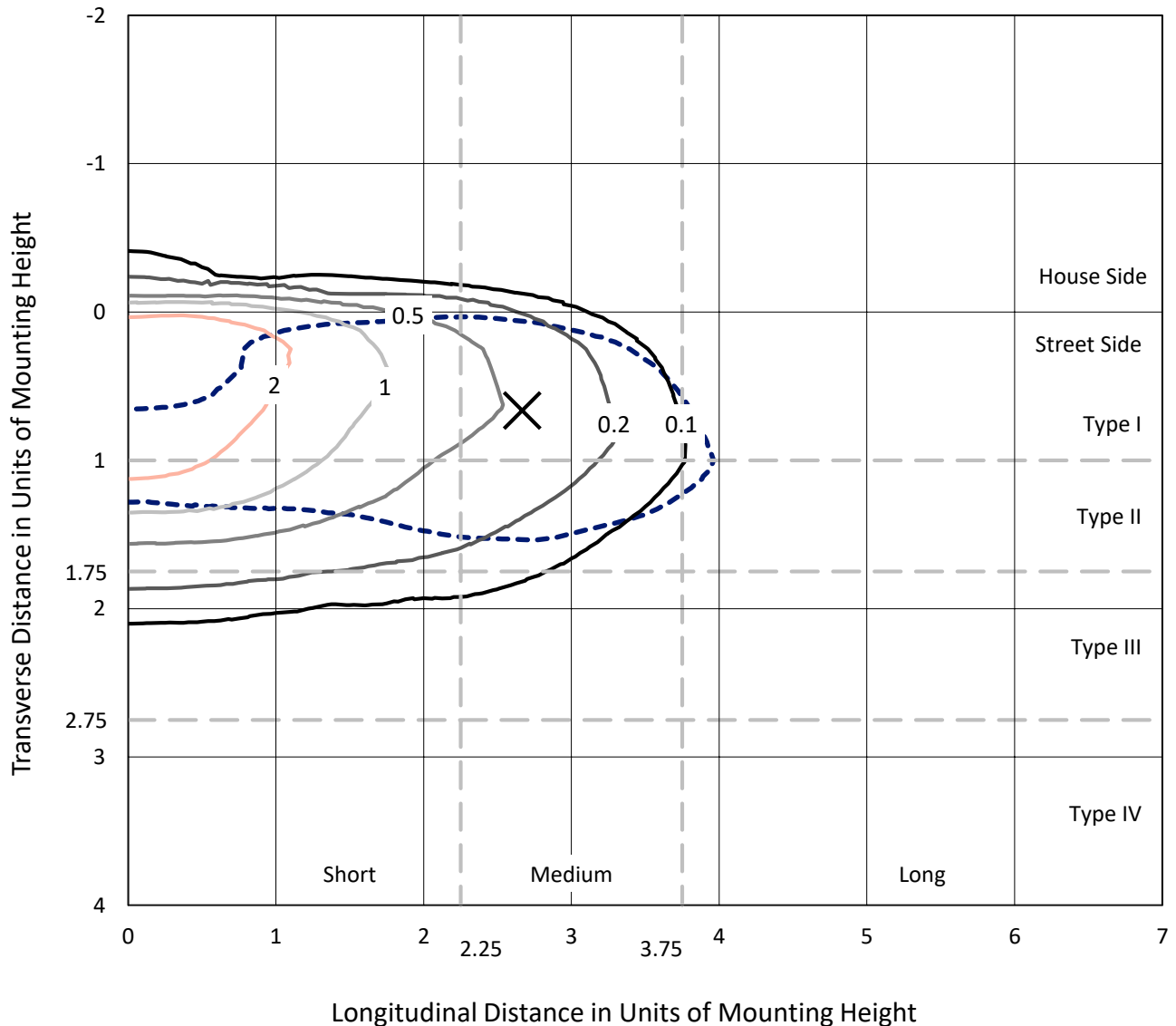
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

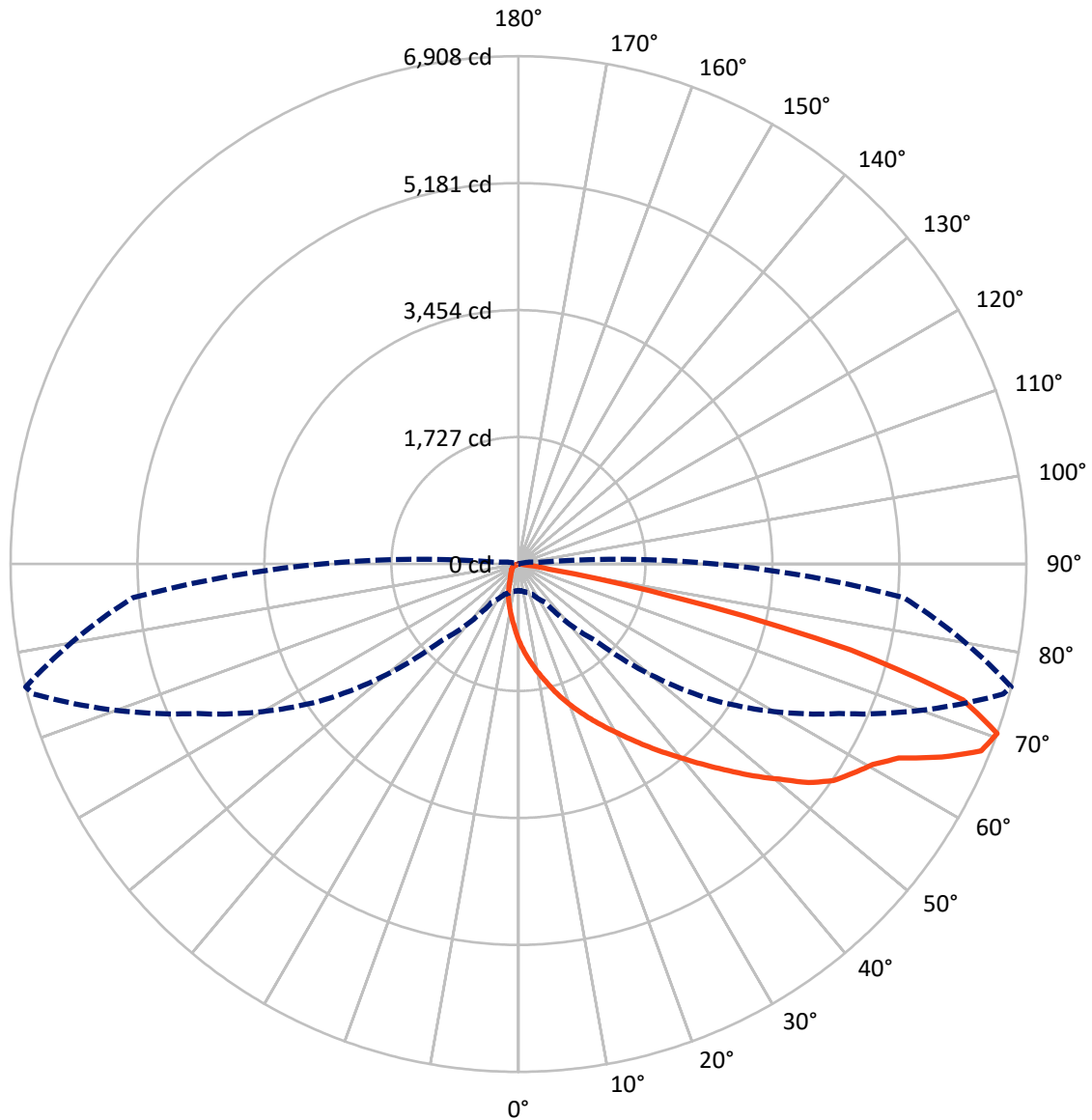
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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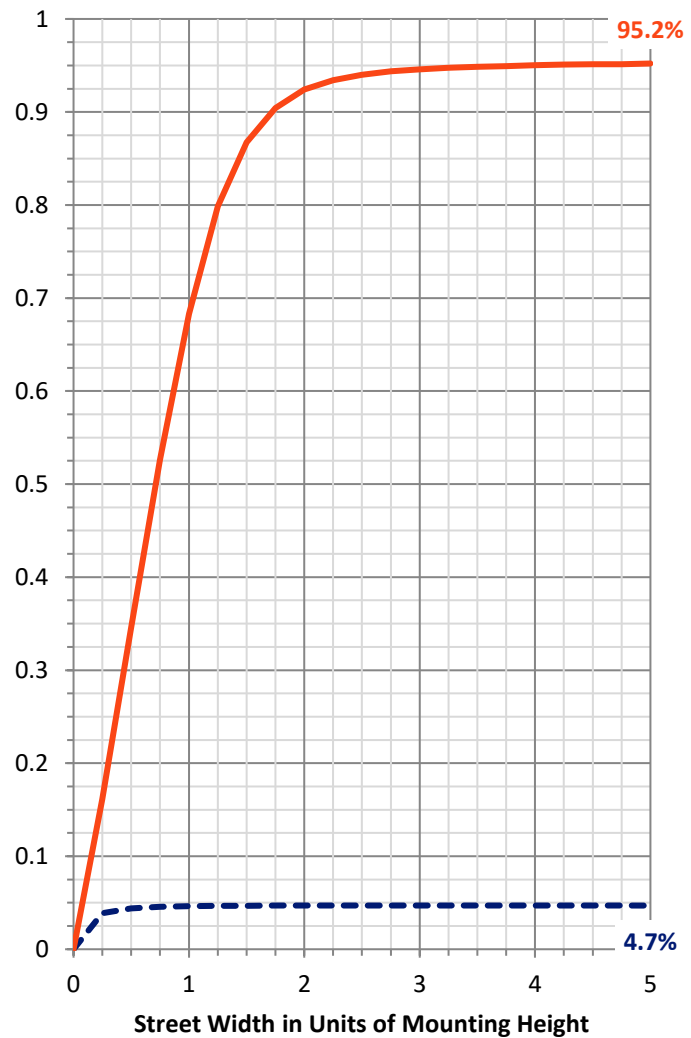
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	368.1	0.0	368.1
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	7435.9	0.0	7435.9
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	7804.0	0.0	7804.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.4	1.3
10°-20°	317.6	4.1
20°-30°	591.5	7.6
30°-40°	1046.3	13.4
40°-50°	1600.0	20.5
50°-60°	1814.0	23.2
60°-70°	1555.1	19.9
70°-80°	753.2	9.7
80°-90°	27.9	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°	7804.0	100.0
0°-180°	7804.0	100.0



--- HS    — SS

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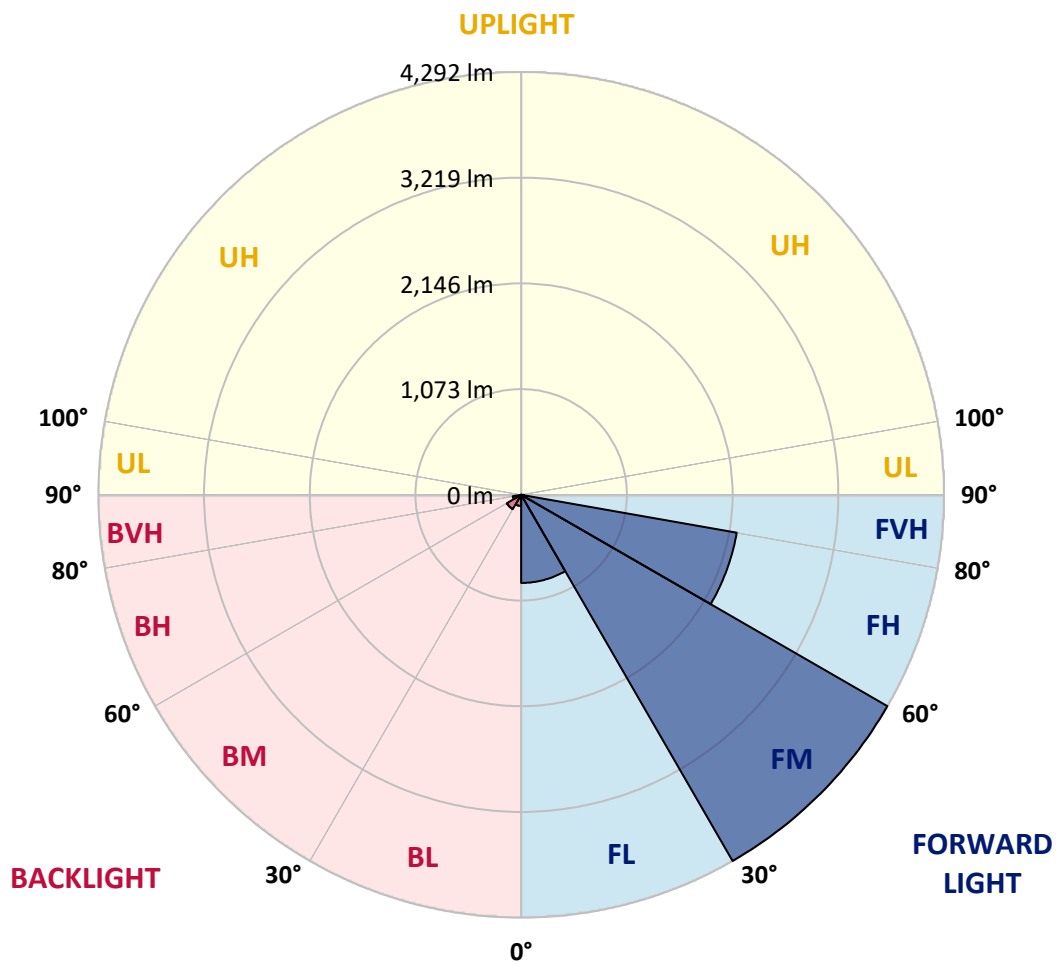
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	894.6	11.5			
FM	(30°-60°)	4292.3	55.0			
FH	(60°-80°)	2221.6	28.5			G2/5000
FVH	(80°-90°)	27.5	0.4			G1/100
BL	(0°-30°)	112.9	1.4	B1/500		
BM	(30°-60°)	168.0	2.2	B0/220		
BH	(60°-80°)	86.7	1.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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°	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6
2.5°	1427.9	1420.1	1412.3	1382.4	1355.1	1330.5	1283.7	1222.6	1168.0	1156.4	1092.7
5°	1677.4	1668.3	1656.6	1626.7	1591.6	1550.0	1481.2	1387.6	1291.5	1270.7	1152.5
7.5°	1846.3	1838.5	1821.6	1807.3	1772.2	1731.9	1655.3	1546.1	1413.6	1387.6	1221.3
10°	1961.9	1956.7	1954.1	1942.4	1916.4	1883.9	1807.3	1693.0	1537.0	1507.2	1294.1
12.5°	2003.5	2003.5	2016.5	2036.0	2039.9	2029.5	1959.3	1845.0	1667.0	1635.8	1379.8
15°	1947.6	1954.1	1982.7	2045.1	2110.0	2152.9	2108.7	2002.2	1809.9	1776.1	1481.2
17.5°	1932.0	1938.5	1958.0	2012.6	2099.6	2214.0	2236.0	2154.2	1945.0	1916.4	1585.1
20°	1976.2	1982.7	1999.6	2046.4	2112.6	2228.3	2320.5	2301.0	2087.9	2058.0	1690.4
22.5°	2081.4	2085.3	2085.3	2121.7	2180.2	2265.9	2373.8	2440.0	2234.7	2202.3	1794.3
25°	2307.5	2299.7	2268.5	2250.3	2288.0	2358.2	2441.3	2562.2	2398.5	2354.3	1906.0
27.5°	2603.7	2629.7	2554.4	2467.3	2438.7	2479.0	2536.2	2670.0	2557.0	2510.2	2007.4
30°	3005.2	2994.8	2896.1	2771.3	2647.9	2633.6	2653.1	2762.3	2715.5	2671.3	2120.4
32.5°	3335.2	3354.7	3250.8	3098.8	2914.3	2827.2	2806.4	2872.7	2884.4	2855.8	2254.2
35°	3674.3	3695.1	3593.8	3424.9	3205.3	3059.8	3000.0	3009.1	3093.6	3057.2	2394.6
37.5°	3978.4	3996.6	3896.5	3723.7	3504.1	3326.1	3240.4	3170.2	3296.3	3263.8	2542.7
40°	4209.6	4212.2	4144.7	3990.1	3782.2	3597.7	3500.2	3362.5	3510.6	3488.5	2697.3
42.5°	4373.4	4378.6	4329.2	4196.7	4004.4	3832.9	3753.6	3589.9	3757.5	3738.0	2876.6
45°	4450.0	4459.1	4453.9	4331.8	4172.0	4023.8	3997.9	3831.6	4027.7	4009.6	3083.2
47.5°	4377.3	4377.3	4443.5	4426.6	4279.8	4181.1	4210.9	4083.6	4321.4	4304.5	3293.7
50°	4074.5	4078.4	4213.5	4407.1	4321.4	4299.3	4392.8	4330.5	4587.7	4598.1	3545.7
52.5°	3279.4	3272.9	3728.9	4100.5	4292.8	4352.6	4560.4	4582.5	4907.4	4938.5	3796.5
55°	2450.4	2446.5	2883.1	3557.4	4092.7	4325.3	4654.0	4807.3	5180.2	5199.7	3983.6
57.5°	1939.8	1929.4	2169.8	2867.5	3640.6	4203.1	4657.9	4850.2	5332.2	5366.0	4165.5
60°	1491.6	1482.5	1661.8	2133.4	3000.0	3878.3	4546.2	4852.8	5479.0	5538.8	4409.7
62.5°	1066.7	1077.1	1214.8	1530.5	2307.5	3419.7	4400.6	4889.2	5740.2	5807.8	4756.6
65°	719.8	714.6	828.9	1042.0	1641.0	2802.5	4177.2	4965.8	6210.5	6328.8	5172.4
67.5°	500.2	504.1	556.1	678.2	1042.0	2151.6	3805.6	5008.7	6696.5	6788.7	5463.4
70°	361.2	366.4	395.0	456.0	636.6	1459.1	3217.0	4812.5	6827.7	6908.2	5260.8
72.5°	237.8	248.2	291.0	323.5	406.7	913.4	2369.9	4146.0	6262.5	6322.3	4413.6
75°	128.6	131.2	187.1	241.7	289.7	569.1	1413.6	2796.0	4685.2	4665.7	2910.4
77.5°	100.0	103.9	115.6	172.8	194.9	313.1	558.7	1262.9	2219.2	2159.4	992.6
80°	61.1	63.7	80.6	102.6	136.4	181.9	163.7	343.0	450.8	422.3	145.5
82.5°	36.4	39.0	48.1	85.8	107.8	85.8	57.2	83.2	84.5	83.2	36.4
85°	6.5	6.5	33.8	59.8	57.2	24.7	33.8	27.3	24.7	26.0	7.8
87.5°	0.0	0.0	13.0	18.2	26.0	9.1	13.0	6.5	6.5	6.5	3.9
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°	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6	1044.6
2.5°	1053.7	1009.5	918.6	839.3	760.1	701.6	657.4	612.0	596.4	576.9	566.5
5°	1071.9	984.8	804.3	660.0	537.9	444.4	384.6	348.2	324.8	307.9	304.0
7.5°	1099.2	965.4	712.0	517.1	383.3	289.7	240.4	215.7	202.7	194.9	192.3
10°	1131.7	948.5	621.1	402.8	270.2	204.0	176.7	166.3	161.1	158.5	157.2
12.5°	1177.1	942.0	544.4	310.5	204.0	167.6	153.3	146.8	142.9	139.0	137.7
15°	1236.9	944.6	474.2	240.4	168.9	149.4	137.7	131.2	126.0	122.1	122.1
17.5°	1299.3	948.5	405.4	194.9	153.3	136.4	123.4	114.3	110.4	106.5	105.2
20°	1357.7	947.2	339.1	166.3	139.0	122.1	109.1	100.0	93.5	89.6	89.6
22.5°	1413.6	939.4	276.7	149.4	127.3	107.8	93.5	84.5	79.3	75.4	75.4
25°	1473.4	923.8	226.1	136.4	113.0	94.8	80.6	71.5	67.6	63.7	63.7
27.5°	1520.1	897.8	184.5	124.7	100.0	81.9	68.9	61.1	57.2	54.6	54.6
30°	1570.8	860.1	153.3	111.7	87.1	70.2	58.5	52.0	48.1	46.8	46.8
32.5°	1626.7	818.5	131.2	98.7	74.1	59.8	49.4	45.5	41.6	40.3	40.3
35°	1691.7	782.2	118.2	85.8	65.0	50.7	42.9	39.0	36.4	36.4	36.4
37.5°	1765.7	744.5	106.5	75.4	55.9	42.9	36.4	35.1	33.8	32.5	32.5
40°	1846.3	704.2	96.1	66.3	48.1	36.4	31.2	31.2	29.9	29.9	29.9
42.5°	1937.2	669.1	87.1	58.5	41.6	31.2	27.3	27.3	26.0	26.0	26.0
45°	2036.0	636.6	79.3	52.0	36.4	27.3	24.7	23.4	22.1	22.1	22.1
47.5°	2152.9	618.5	72.8	45.5	31.2	23.4	20.8	19.5	18.2	16.9	16.9
50°	2302.3	626.2	66.3	37.7	27.3	19.5	16.9	15.6	14.3	13.0	13.0
52.5°	2420.5	622.4	57.2	32.5	22.1	15.6	13.0	11.7	10.4	9.1	9.1
55°	2506.3	606.8	49.4	27.3	16.9	13.0	10.4	7.8	6.5	6.5	6.5
57.5°	2590.8	591.2	41.6	22.1	13.0	9.1	6.5	5.2	5.2	5.2	5.2
60°	2722.0	569.1	36.4	18.2	10.4	6.5	3.9	3.9	2.6	2.6	2.6
62.5°	2881.8	541.8	29.9	15.6	7.8	5.2	2.6	2.6	0.0	0.0	0.0
65°	3057.2	493.7	24.7	11.7	6.5	3.9	2.6	0.0	0.0	0.0	0.0
67.5°	3016.9	396.3	20.8	7.8	5.2	2.6	1.3	0.0	0.0	0.0	0.0
70°	2668.7	267.7	16.9	6.5	3.9	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	2090.5	158.5	11.7	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0
75°	1338.3	79.3	7.8	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	448.2	39.0	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.7	13.0	2.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.3	5.2	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	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)