

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: P398067

Luminaire Tested: **ARCH-S-PA1-80-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398067  
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-PA1-80-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1050mA 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: 8434 lumens  
Efficiency: N/A  
Efficacy: 101.6 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

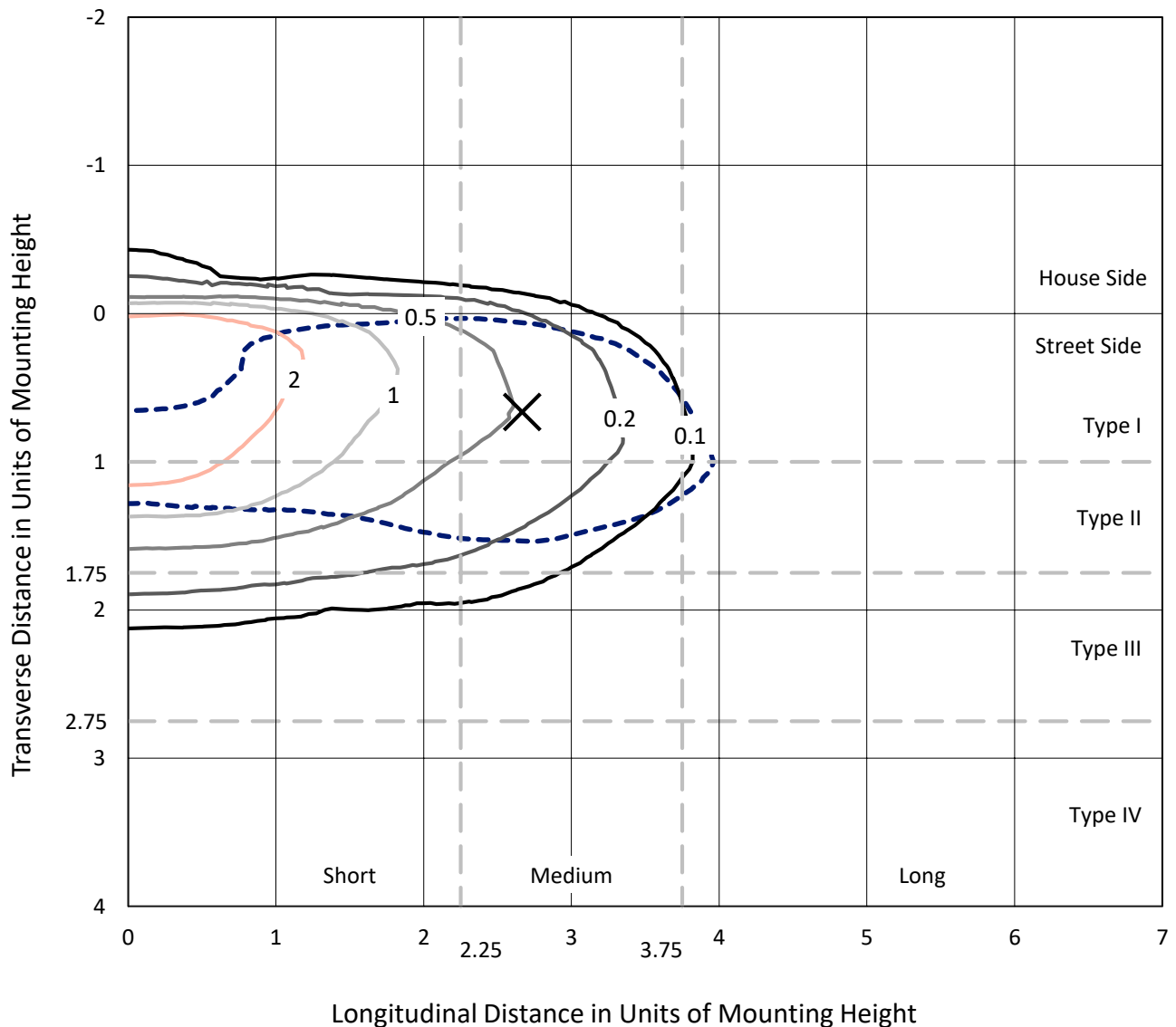
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

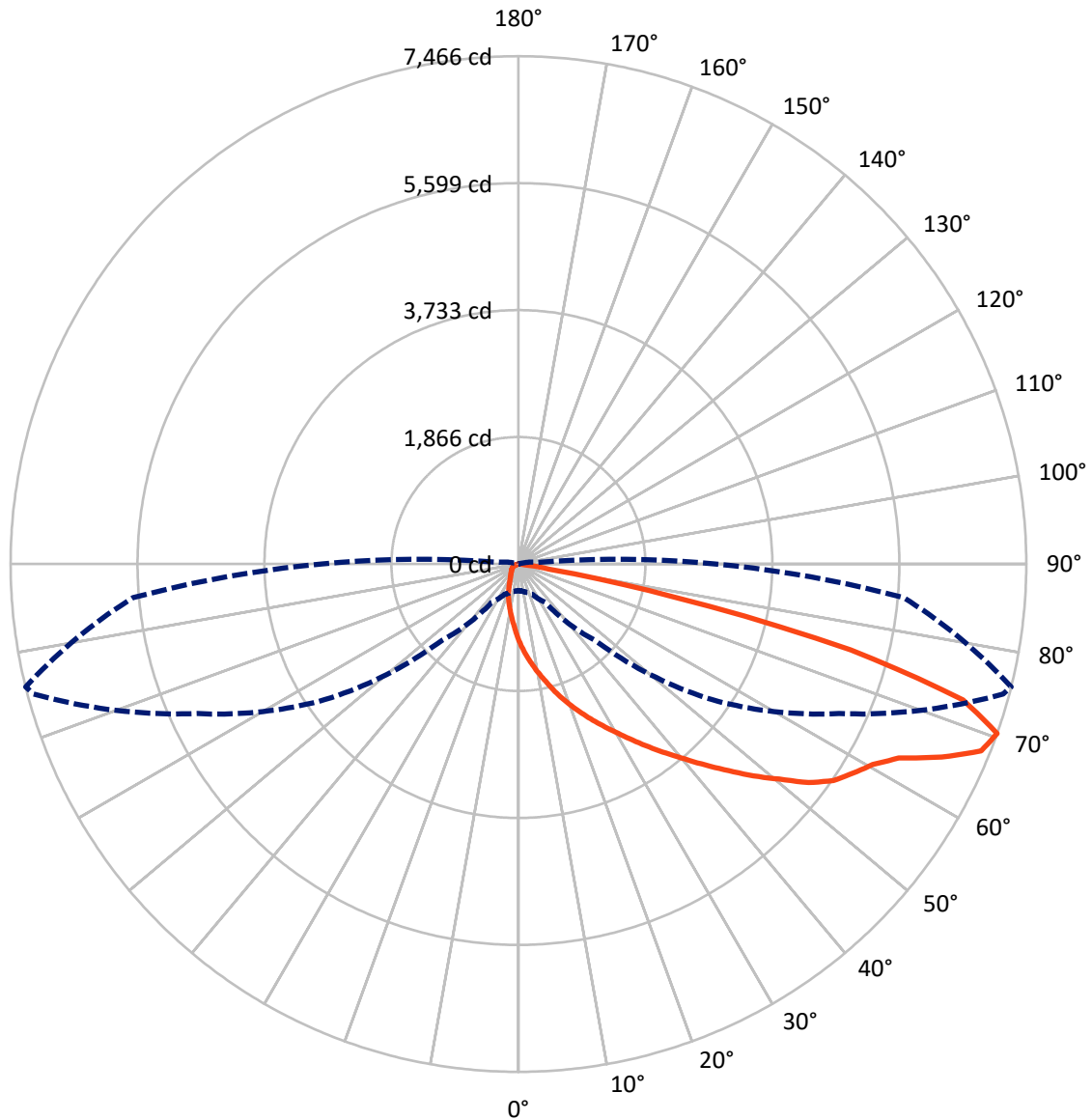
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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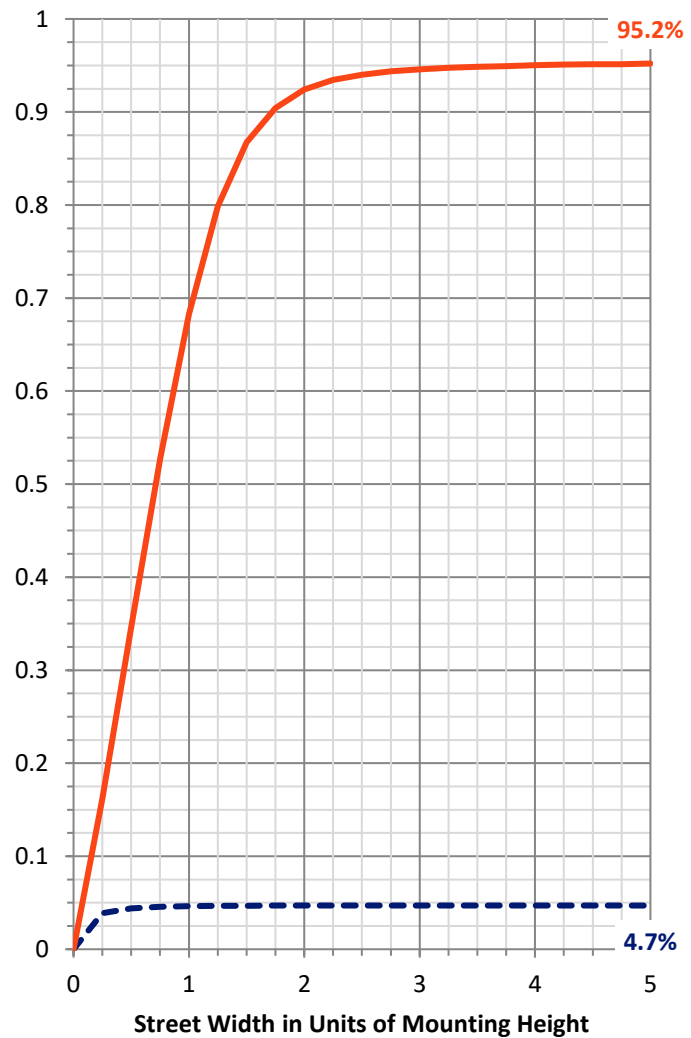
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	397.8	0.0	397.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	8036.2	0.0	8036.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	8434.0	0.0	8434.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	1.3
10°-20°	343.3	4.1
20°-30°	639.3	7.6
30°-40°	1130.7	13.4
40°-50°	1729.2	20.5
50°-60°	1960.4	23.2
60°-70°	1680.6	19.9
70°-80°	814.0	9.7
80°-90°	30.2	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°	8434.0	100.0
0°-180°	8434.0	100.0



--- HS    — SS

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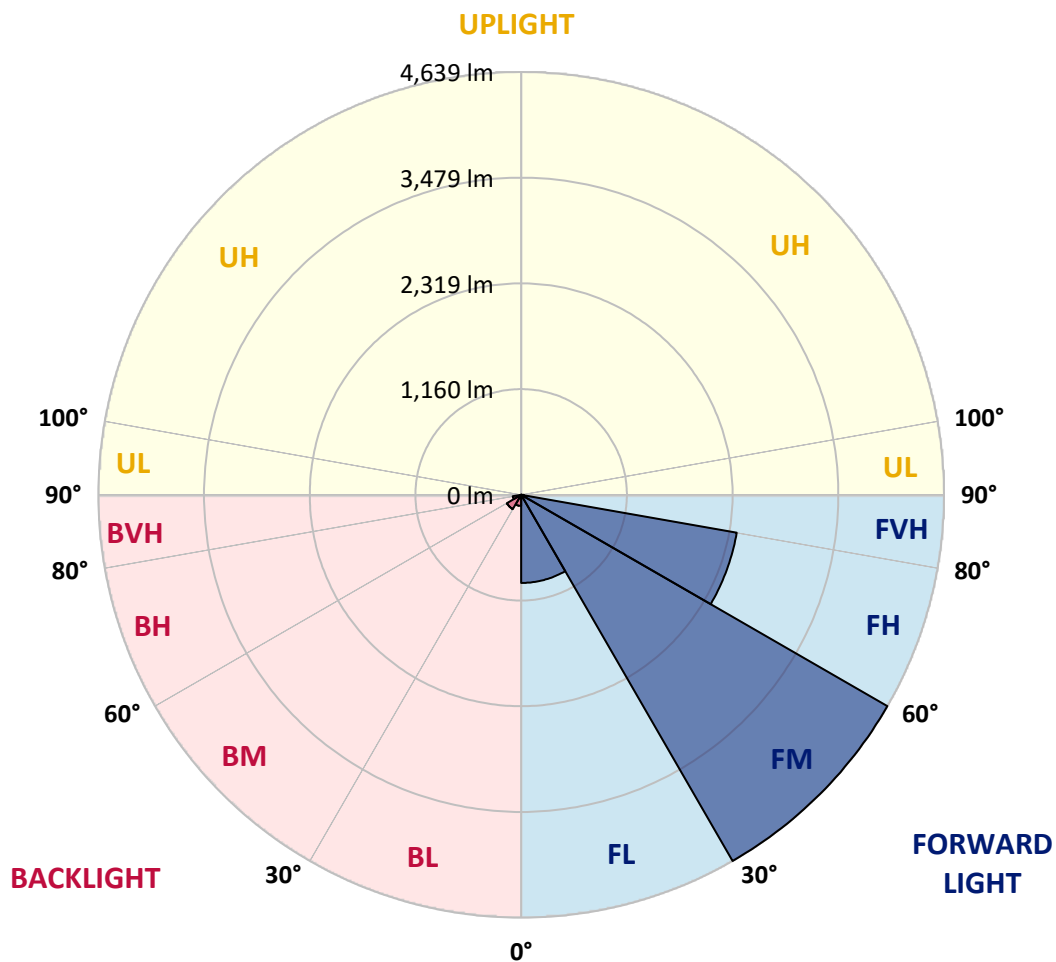
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	966.9	11.5			
FM	(30°-60°)	4638.8	55.0			
FH	(60°-80°)	2400.9	28.5			G2/5000
FVH	(80°-90°)	29.7	0.4			G1/100
BL	(0°-30°)	122.0	1.4	B1/500		
BM	(30°-60°)	181.6	2.2	B0/220		
BH	(60°-80°)	93.7	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°	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9
2.5°	1543.2	1534.7	1526.3	1494.0	1464.5	1437.9	1387.3	1321.3	1262.3	1249.7	1180.9
5°	1812.8	1802.9	1790.3	1758.0	1720.1	1675.2	1600.7	1499.6	1395.7	1373.3	1245.5
7.5°	1995.3	1986.9	1968.6	1953.2	1915.3	1871.7	1788.9	1671.0	1527.7	1499.6	1319.9
10°	2120.3	2114.7	2111.9	2099.2	2071.1	2036.0	1953.2	1829.6	1661.1	1628.8	1398.5
12.5°	2165.2	2165.2	2179.3	2200.3	2204.5	2193.3	2117.5	1993.9	1801.5	1767.8	1491.2
15°	2104.8	2111.9	2142.7	2210.1	2280.4	2326.7	2279.0	2163.8	1956.0	1919.5	1600.7
17.5°	2088.0	2095.0	2116.1	2175.0	2269.1	2392.7	2416.6	2328.1	2102.0	2071.1	1713.1
20°	2135.7	2142.7	2161.0	2211.6	2283.2	2408.1	2507.8	2486.8	2256.5	2224.2	1826.8
22.5°	2249.5	2253.7	2253.7	2293.0	2356.2	2448.9	2565.4	2637.0	2415.2	2380.1	1939.1
25°	2493.8	2485.4	2451.7	2432.0	2472.7	2548.6	2638.4	2769.0	2592.1	2544.3	2059.9
27.5°	2813.9	2842.0	2760.6	2666.5	2635.6	2679.1	2740.9	2885.5	2763.4	2712.8	2169.4
30°	3247.8	3236.6	3129.9	2995.1	2861.7	2846.2	2867.3	2985.2	2934.7	2887.0	2291.6
32.5°	3604.5	3625.5	3513.2	3348.9	3149.5	3055.5	3033.0	3104.6	3117.2	3086.3	2436.2
35°	3971.0	3993.4	3883.9	3701.4	3464.1	3306.8	3242.2	3252.0	3343.3	3304.0	2587.9
37.5°	4299.5	4319.2	4211.1	4024.3	3787.0	3594.7	3502.0	3426.2	3562.4	3527.3	2747.9
40°	4549.5	4552.3	4479.3	4312.2	4087.5	3888.1	3782.8	3634.0	3794.0	3770.2	2915.0
42.5°	4726.4	4732.0	4678.7	4535.4	4327.6	4142.3	4056.6	3879.7	4060.8	4039.8	3108.8
45°	4809.2	4819.1	4813.5	4681.5	4508.8	4348.7	4320.6	4140.9	4352.9	4333.2	3332.1
47.5°	4730.6	4730.6	4802.2	4784.0	4625.3	4518.6	4550.9	4413.3	4670.2	4652.0	3559.5
50°	4403.4	4407.7	4553.7	4762.9	4670.2	4646.4	4747.5	4680.1	4958.1	4969.3	3832.0
52.5°	3544.1	3537.1	4029.9	4431.5	4639.3	4703.9	4928.6	4952.5	5303.5	5337.2	4103.0
55°	2648.2	2644.0	3115.8	3844.6	4423.1	4674.5	5029.7	5195.4	5598.4	5619.5	4305.2
57.5°	2096.4	2085.2	2344.9	3099.0	3934.5	4542.5	5033.9	5241.7	5762.7	5799.2	4501.7
60°	1612.0	1602.1	1795.9	2305.6	3242.2	4191.4	4913.2	5244.5	5921.3	5985.9	4765.7
62.5°	1152.8	1164.0	1312.9	1654.1	2493.8	3695.8	4755.9	5283.9	6203.6	6276.6	5140.6
65°	777.9	772.3	895.9	1126.1	1773.5	3028.8	4514.4	5366.7	6711.9	6839.7	5590.0
67.5°	540.6	544.8	601.0	733.0	1126.1	2325.3	4112.8	5413.0	7237.0	7336.7	5904.5
70°	390.4	396.0	426.9	492.9	688.0	1576.9	3476.7	5201.0	7378.9	7465.9	5685.4
72.5°	257.0	268.2	314.5	349.6	439.5	987.1	2561.2	4480.7	6768.1	6832.6	4769.9
75°	139.0	141.8	202.2	261.2	313.1	615.0	1527.7	3021.8	5063.4	5042.3	3145.3
77.5°	108.1	112.3	125.0	186.8	210.6	338.4	603.8	1364.8	2398.3	2333.7	1072.8
80°	66.0	68.8	87.1	110.9	147.4	196.6	176.9	370.7	487.2	456.4	157.3
82.5°	39.3	42.1	52.0	92.7	116.5	92.7	61.8	89.9	91.3	89.9	39.3
85°	7.0	7.0	36.5	64.6	61.8	26.7	36.5	29.5	26.7	28.1	8.4
87.5°	0.0	0.0	14.0	19.7	28.1	9.8	14.0	7.0	7.0	7.0	4.2
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°	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9	1128.9
2.5°	1138.8	1091.0	992.7	907.1	821.4	758.2	710.5	661.4	644.5	623.4	612.2
5°	1158.4	1064.4	869.2	713.3	581.3	480.2	415.6	376.3	351.0	332.8	328.6
7.5°	1187.9	1043.3	769.5	558.9	414.2	313.1	259.8	233.1	219.0	210.6	207.8
10°	1223.0	1025.0	671.2	435.3	292.1	220.5	191.0	179.7	174.1	171.3	169.9
12.5°	1272.2	1018.0	588.3	335.6	220.5	181.1	165.7	158.7	154.5	150.2	148.8
15°	1336.8	1020.8	512.5	259.8	182.5	161.5	148.8	141.8	136.2	132.0	132.0
17.5°	1404.2	1025.0	438.1	210.6	165.7	147.4	133.4	123.6	119.4	115.1	113.7
20°	1467.3	1023.6	366.5	179.7	150.2	132.0	117.9	108.1	101.1	96.9	96.9
22.5°	1527.7	1015.2	299.1	161.5	137.6	116.5	101.1	91.3	85.7	81.4	81.4
25°	1592.3	998.4	244.3	147.4	122.2	102.5	87.1	77.2	73.0	68.8	68.8
27.5°	1642.9	970.3	199.4	134.8	108.1	88.5	74.4	66.0	61.8	59.0	59.0
30°	1697.6	929.6	165.7	120.8	94.1	75.8	63.2	56.2	52.0	50.5	50.5
32.5°	1758.0	884.6	141.8	106.7	80.0	64.6	53.4	49.1	44.9	43.5	43.5
35°	1828.2	845.3	127.8	92.7	70.2	54.8	46.3	42.1	39.3	39.3	39.3
37.5°	1908.3	804.6	115.1	81.4	60.4	46.3	39.3	37.9	36.5	35.1	35.1
40°	1995.3	761.1	103.9	71.6	52.0	39.3	33.7	33.7	32.3	32.3	32.3
42.5°	2093.6	723.1	94.1	63.2	44.9	33.7	29.5	29.5	28.1	28.1	28.1
45°	2200.3	688.0	85.7	56.2	39.3	29.5	26.7	25.3	23.9	23.9	23.9
47.5°	2326.7	668.4	78.6	49.1	33.7	25.3	22.5	21.1	19.7	18.3	18.3
50°	2488.2	676.8	71.6	40.7	29.5	21.1	18.3	16.8	15.4	14.0	14.0
52.5°	2616.0	672.6	61.8	35.1	23.9	16.8	14.0	12.6	11.2	9.8	9.8
55°	2708.6	655.7	53.4	29.5	18.3	14.0	11.2	8.4	7.0	7.0	7.0
57.5°	2799.9	638.9	44.9	23.9	14.0	9.8	7.0	5.6	5.6	5.6	5.6
60°	2941.7	615.0	39.3	19.7	11.2	7.0	4.2	4.2	2.8	2.8	2.8
62.5°	3114.4	585.5	32.3	16.8	8.4	5.6	2.8	2.8	0.0	0.0	0.0
65°	3304.0	533.6	26.7	12.6	7.0	4.2	2.8	0.0	0.0	0.0	0.0
67.5°	3260.5	428.3	22.5	8.4	5.6	2.8	1.4	0.0	0.0	0.0	0.0
70°	2884.1	289.3	18.3	7.0	4.2	2.8	1.4	0.0	0.0	0.0	0.0
72.5°	2259.3	171.3	12.6	5.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0
75°	1446.3	85.7	8.4	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	484.4	42.1	5.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.8	14.0	2.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.4	5.6	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	1.4	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)