

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: P397851

Luminaire Tested: **ARCH-S-PA1-50-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397851  
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-PA1-50-750-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 670mA 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: 6097 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B0 - U0 - G1

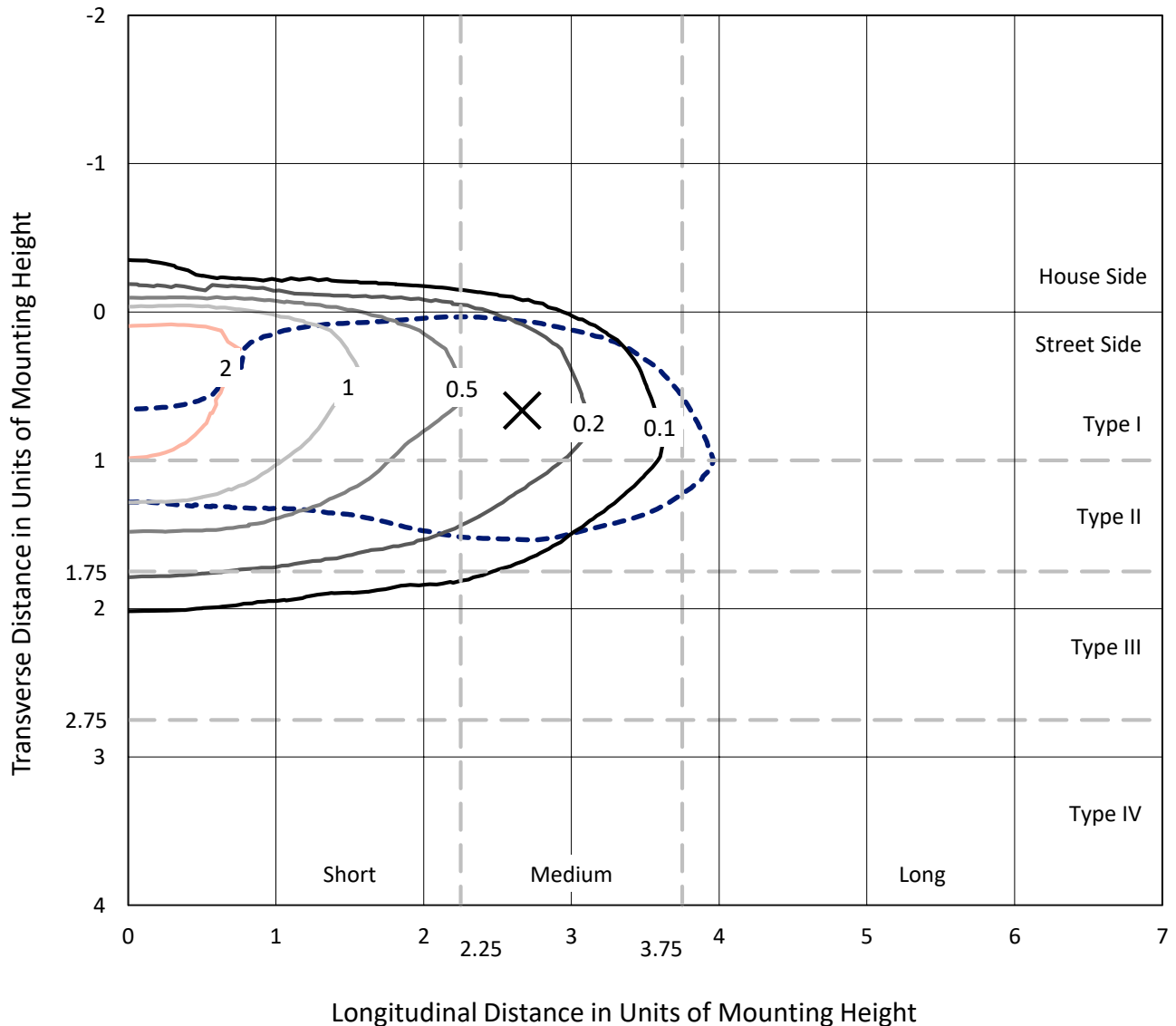
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397851  
 CATALOG NUMBER: ARCH-S-PA1-50-750-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

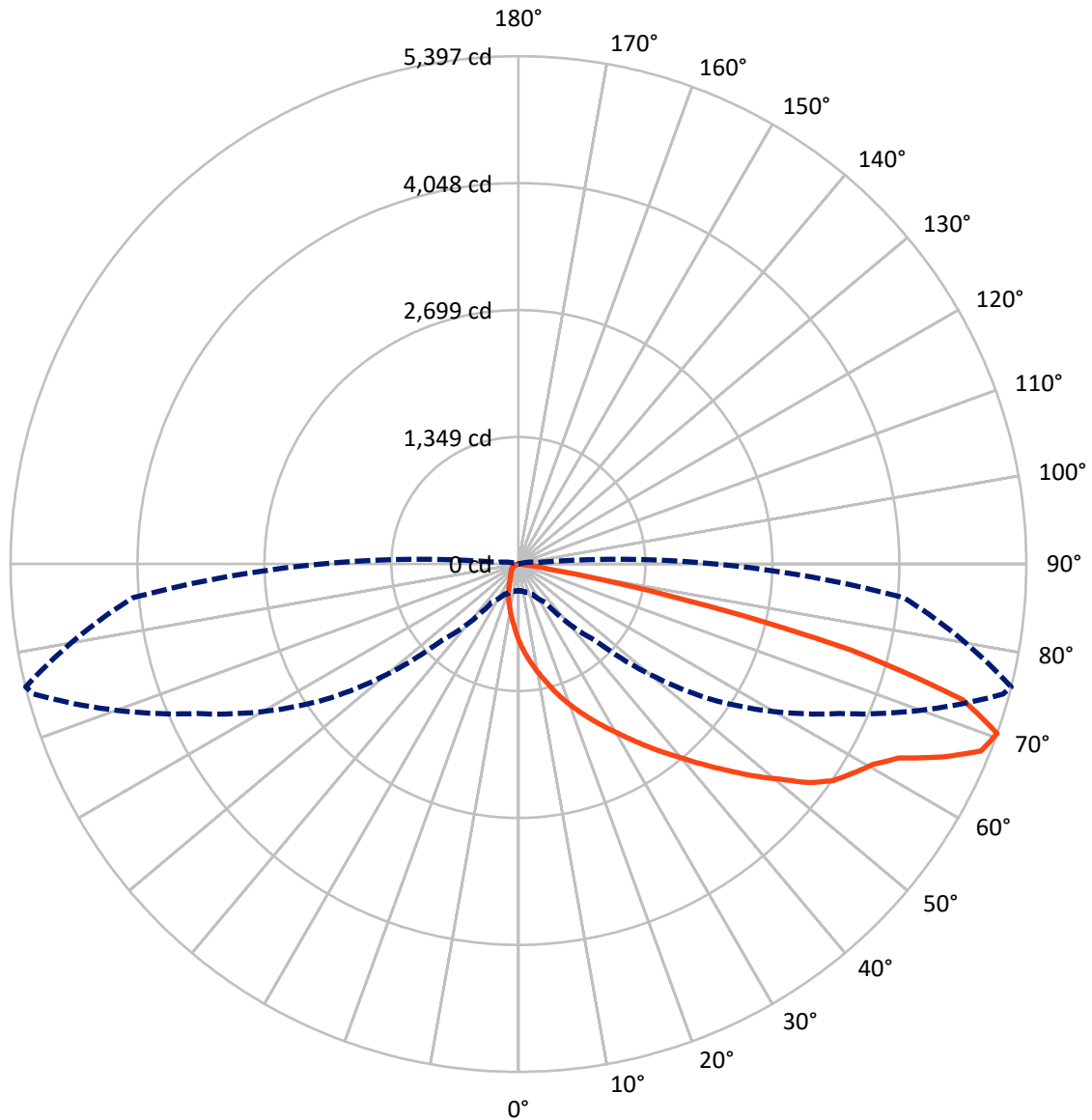
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P397851  
CATALOG NUMBER: ARCH-S-PA1-50-750-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397851

CATALOG NUMBER: ARCH-S-PA1-50-750-U-T2R-HSS

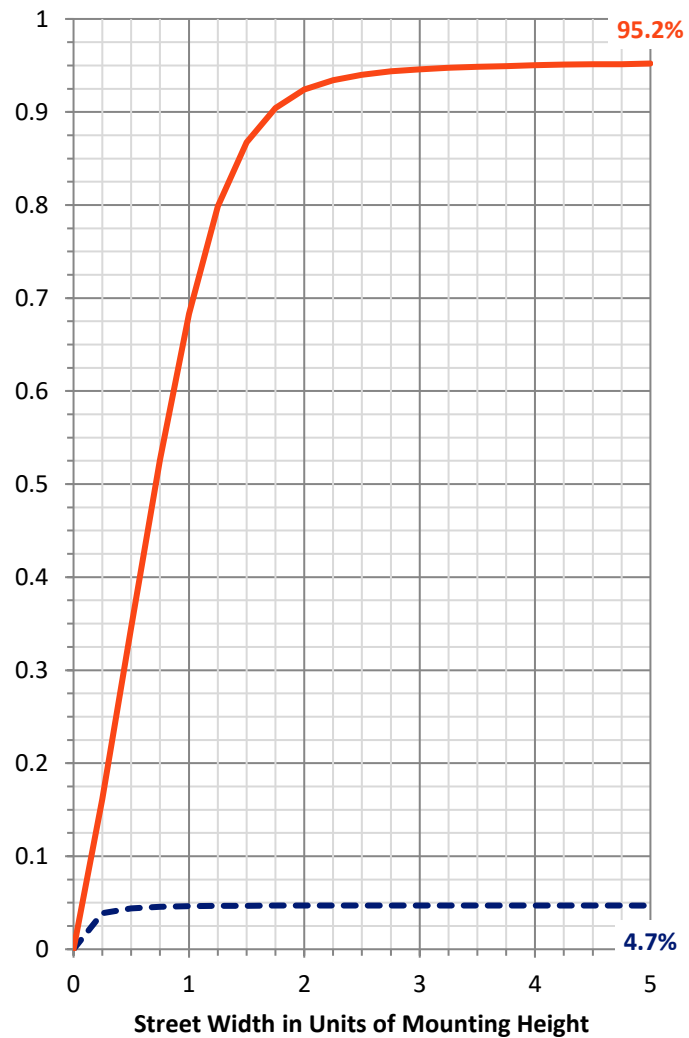
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	287.6	0.0	287.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	5809.5	0.0	5809.5
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	6097.0	0.0	6097.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.9	1.3
10°-20°	248.1	4.1
20°-30°	462.1	7.6
30°-40°	817.4	13.4
40°-50°	1250.0	20.5
50°-60°	1417.2	23.2
60°-70°	1214.9	19.9
70°-80°	588.4	9.7
80°-90°	21.8	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°	6097.0	100.0
0°-180°	6097.0	100.0



--- HS    — SS

REPORT NUMBER: P397851

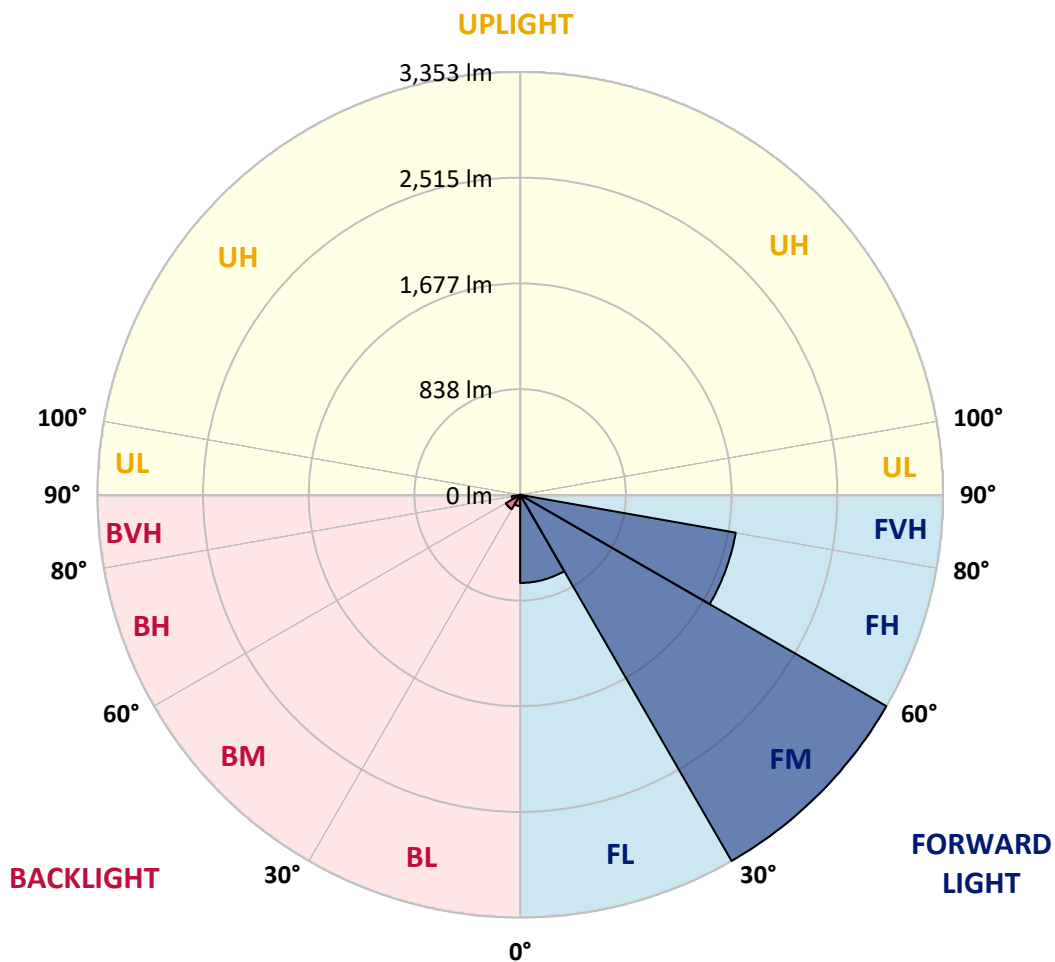
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	699.0	11.5			
FM	(30°-60°)	3353.4	55.0			
FH	(60°-80°)	1735.6	28.5			G1/1800
FVH	(80°-90°)	21.5	0.4			G1/100
BL	(0°-30°)	88.2	1.4	B0/110		
BM	(30°-60°)	131.3	2.2	B0/220		
BH	(60°-80°)	67.7	1.1	B0/110		G0/110
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: B0-U0-G1**

Type II Medium





REPORT NUMBER: P397851

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1
2.5°	1115.6	1109.5	1103.4	1080.0	1058.7	1039.4	1002.9	955.2	912.6	903.4	853.7
5°	1310.5	1303.4	1294.2	1270.9	1243.5	1211.0	1157.2	1084.1	1009.0	992.7	900.4
7.5°	1442.4	1436.3	1423.1	1412.0	1384.6	1353.1	1293.2	1207.9	1104.4	1084.1	954.2
10°	1532.8	1528.7	1526.7	1517.5	1497.2	1471.9	1412.0	1322.6	1200.8	1177.5	1011.0
12.5°	1565.3	1565.3	1575.4	1590.6	1593.7	1585.6	1530.7	1441.4	1302.3	1278.0	1078.0
15°	1521.6	1526.7	1549.0	1597.7	1648.5	1682.0	1647.5	1564.2	1414.0	1387.6	1157.2
17.5°	1509.4	1514.5	1529.7	1572.4	1640.4	1729.7	1746.9	1683.0	1519.6	1497.2	1238.4
20°	1543.9	1549.0	1562.2	1598.7	1650.5	1740.9	1812.9	1797.7	1631.2	1607.9	1320.6
22.5°	1626.2	1629.2	1629.2	1657.6	1703.3	1770.3	1854.5	1906.3	1745.9	1720.6	1401.8
25°	1802.8	1796.7	1772.3	1758.1	1787.6	1842.4	1907.3	2001.7	1873.8	1839.3	1489.1
27.5°	2034.2	2054.5	1995.6	1927.6	1905.3	1936.8	1981.4	2086.0	1997.7	1961.1	1568.3
30°	2347.9	2339.8	2262.6	2165.2	2068.7	2057.6	2072.8	2158.1	2121.5	2087.0	1656.6
32.5°	2605.7	2620.9	2539.7	2421.0	2276.8	2208.8	2192.6	2244.3	2253.5	2231.1	1761.2
35°	2870.6	2886.9	2807.7	2675.7	2504.2	2390.5	2343.8	2350.9	2416.9	2388.5	1870.8
37.5°	3108.2	3122.4	3044.2	2909.2	2737.7	2598.6	2531.6	2476.8	2575.3	2549.9	1986.5
40°	3288.9	3290.9	3238.1	3117.3	2954.9	2810.8	2734.6	2627.0	2742.7	2725.5	2107.3
42.5°	3416.8	3420.8	3382.2	3278.7	3128.5	2994.5	2932.6	2804.7	2935.6	2920.4	2247.4
45°	3476.6	3483.7	3479.7	3384.3	3259.4	3143.7	3123.4	2993.5	3146.7	3132.5	2408.8
47.5°	3419.8	3419.8	3471.6	3458.4	3343.7	3266.5	3289.9	3190.4	3376.1	3363.0	2573.2
50°	3183.3	3186.3	3291.9	3443.1	3376.1	3358.9	3432.0	3383.3	3584.2	3592.4	2770.1
52.5°	2562.1	2557.0	2913.3	3203.6	3353.8	3400.5	3562.9	3580.2	3833.9	3858.3	2966.1
55°	1914.4	1911.4	2252.5	2779.3	3197.5	3379.2	3636.0	3755.8	4047.1	4062.3	3112.2
57.5°	1515.5	1507.4	1695.2	2240.3	2844.2	3283.8	3639.1	3789.3	4165.9	4192.3	3254.3
60°	1165.3	1158.2	1298.3	1666.8	2343.8	3030.0	3551.8	3791.3	4280.6	4327.3	3445.2
62.5°	833.4	841.5	949.1	1195.8	1802.8	2671.7	3438.1	3819.7	4484.6	4537.4	3716.2
65°	562.4	558.3	647.6	814.1	1282.0	2189.5	3263.5	3879.6	4852.1	4944.4	4041.0
67.5°	390.8	393.9	434.5	529.9	814.1	1681.0	2973.2	3913.1	5231.7	5303.8	4268.4
70°	282.2	286.3	308.6	356.3	497.4	1139.9	2513.3	3759.8	5334.2	5397.2	4110.1
72.5°	185.8	193.9	227.4	252.8	317.7	713.6	1851.5	3239.1	4892.7	4939.4	3448.2
75°	100.5	102.5	146.2	188.8	226.4	444.6	1104.4	2184.4	3660.4	3645.1	2273.8
77.5°	78.2	81.2	90.3	135.0	152.3	244.6	436.5	986.7	1733.8	1687.1	775.5
80°	47.7	49.7	62.9	80.2	106.6	142.1	127.9	268.0	352.2	329.9	113.7
82.5°	28.4	30.5	37.6	67.0	84.3	67.0	44.7	65.0	66.0	65.0	28.4
85°	5.1	5.1	26.4	46.7	44.7	19.3	26.4	21.3	19.3	20.3	6.1
87.5°	0.0	0.0	10.2	14.2	20.3	7.1	10.2	5.1	5.1	5.1	3.0
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: P397851

CATALOG NUMBER: ARCH-S-PA1-50-750-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1	816.1
2.5°	823.2	788.7	717.7	655.7	593.8	548.1	513.6	478.1	465.9	450.7	442.6
5°	837.4	769.4	628.3	515.7	420.2	347.2	300.5	272.0	253.8	240.6	237.5
7.5°	858.8	754.2	556.3	404.0	299.4	226.4	187.8	168.5	158.4	152.3	150.2
10°	884.1	741.0	485.2	314.7	211.1	159.4	138.1	129.9	125.9	123.8	122.8
12.5°	919.7	735.9	425.3	242.6	159.4	130.9	119.8	114.7	111.7	108.6	107.6
15°	966.4	738.0	370.5	187.8	132.0	116.7	107.6	102.5	98.5	95.4	95.4
17.5°	1015.1	741.0	316.7	152.3	119.8	106.6	96.4	89.3	86.3	83.2	82.2
20°	1060.8	740.0	264.9	129.9	108.6	95.4	85.3	78.2	73.1	70.0	70.0
22.5°	1104.4	733.9	216.2	116.7	99.5	84.3	73.1	66.0	61.9	58.9	58.9
25°	1151.1	721.7	176.6	106.6	88.3	74.1	62.9	55.8	52.8	49.7	49.7
27.5°	1187.6	701.4	144.1	97.4	78.2	63.9	53.8	47.7	44.7	42.6	42.6
30°	1227.2	672.0	119.8	87.3	68.0	54.8	45.7	40.6	37.6	36.5	36.5
32.5°	1270.9	639.5	102.5	77.1	57.9	46.7	38.6	35.5	32.5	31.5	31.5
35°	1321.6	611.1	92.4	67.0	50.8	39.6	33.5	30.5	28.4	28.4	28.4
37.5°	1379.5	581.6	83.2	58.9	43.6	33.5	28.4	27.4	26.4	25.4	25.4
40°	1442.4	550.2	75.1	51.8	37.6	28.4	24.4	24.4	23.3	23.3	23.3
42.5°	1513.5	522.8	68.0	45.7	32.5	24.4	21.3	21.3	20.3	20.3	20.3
45°	1590.6	497.4	61.9	40.6	28.4	21.3	19.3	18.3	17.3	17.3	17.3
47.5°	1682.0	483.2	56.8	35.5	24.4	18.3	16.2	15.2	14.2	13.2	13.2
50°	1798.7	489.3	51.8	29.4	21.3	15.2	13.2	12.2	11.2	10.2	10.2
52.5°	1891.1	486.2	44.7	25.4	17.3	12.2	10.2	9.1	8.1	7.1	7.1
55°	1958.1	474.0	38.6	21.3	13.2	10.2	8.1	6.1	5.1	5.1	5.1
57.5°	2024.1	461.9	32.5	17.3	10.2	7.1	5.1	4.1	4.1	4.1	4.1
60°	2126.6	444.6	28.4	14.2	8.1	5.1	3.0	3.0	2.0	2.0	2.0
62.5°	2251.4	423.3	23.3	12.2	6.1	4.1	2.0	2.0	0.0	0.0	0.0
65°	2388.5	385.7	19.3	9.1	5.1	3.0	2.0	0.0	0.0	0.0	0.0
67.5°	2357.0	309.6	16.2	6.1	4.1	2.0	1.0	0.0	0.0	0.0	0.0
70°	2085.0	209.1	13.2	5.1	3.0	2.0	1.0	0.0	0.0	0.0	0.0
72.5°	1633.3	123.8	9.1	4.1	2.0	1.0	0.0	0.0	0.0	0.0	0.0
75°	1045.5	61.9	6.1	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	350.2	30.5	4.1	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	49.7	10.2	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	11.2	4.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	2.0	1.0	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)