

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: P398166

Luminaire Tested: **ARCH-S-PA1-90-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398166
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-PA1-90-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1180mA 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: 7184 lumens
Efficiency: N/A
Efficacy: 76.4 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 - G2

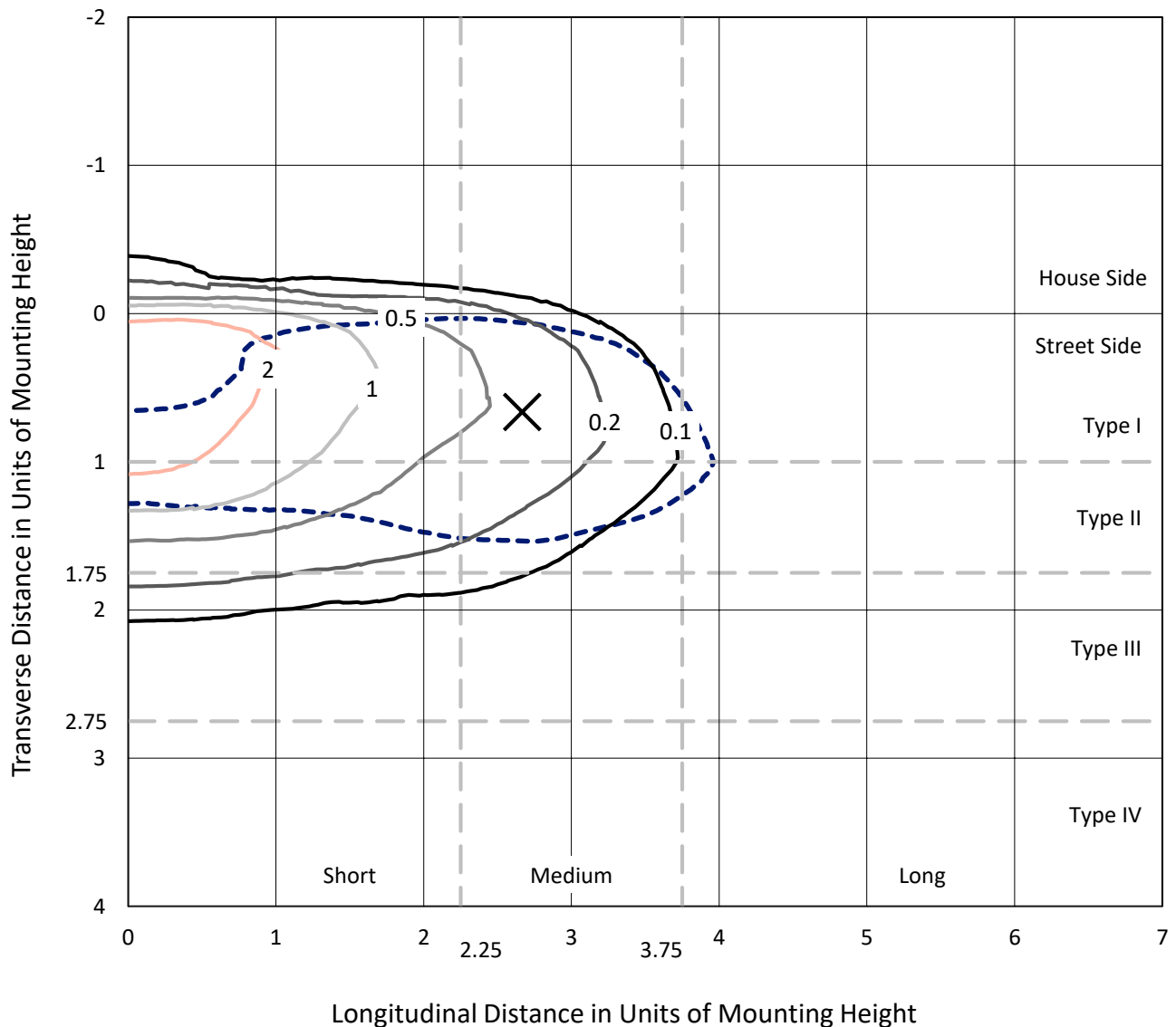
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398166
 CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

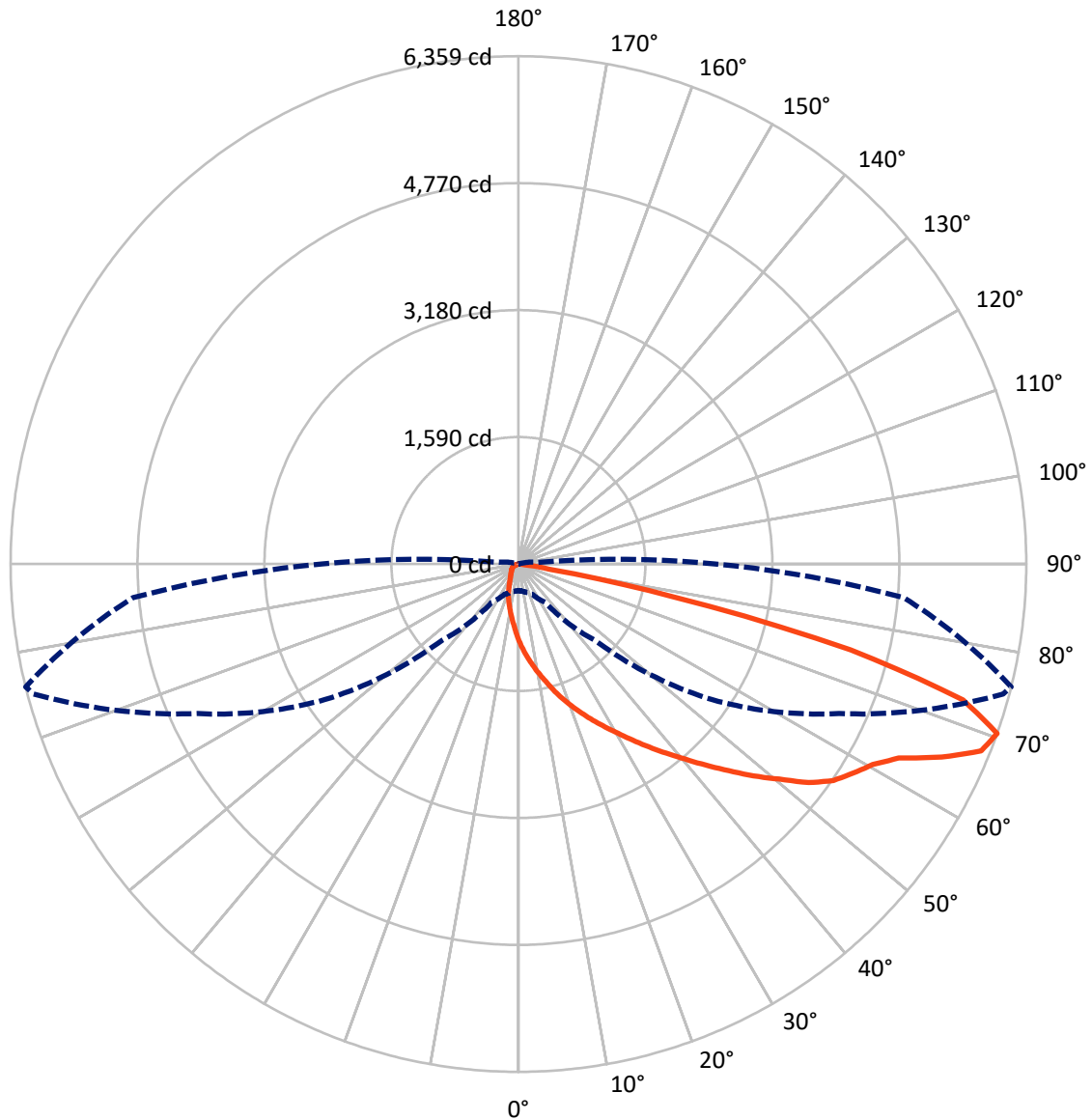
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P398166
CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P398166

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

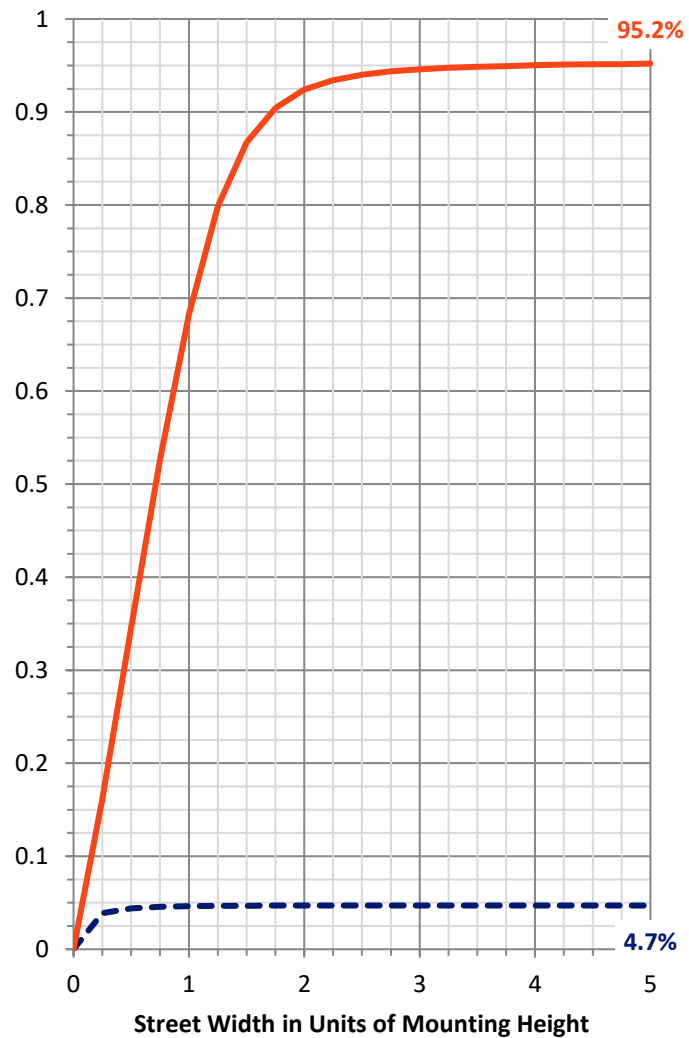
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	338.8	0.0	338.8
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6845.2	0.0	6845.2
	% Fixture	95.3	0.0	95.3
Total	Lumens	7184.0	0.0	7184.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.3
10°-20°	292.4	4.1
20°-30°	544.5	7.6
30°-40°	963.2	13.4
40°-50°	1472.9	20.5
50°-60°	1669.9	23.2
60°-70°	1431.5	19.9
70°-80°	693.3	9.7
80°-90°	25.7	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°	7184.0	100.0
0°-180°	7184.0	100.0



--- HS — SS

REPORT NUMBER: P398166

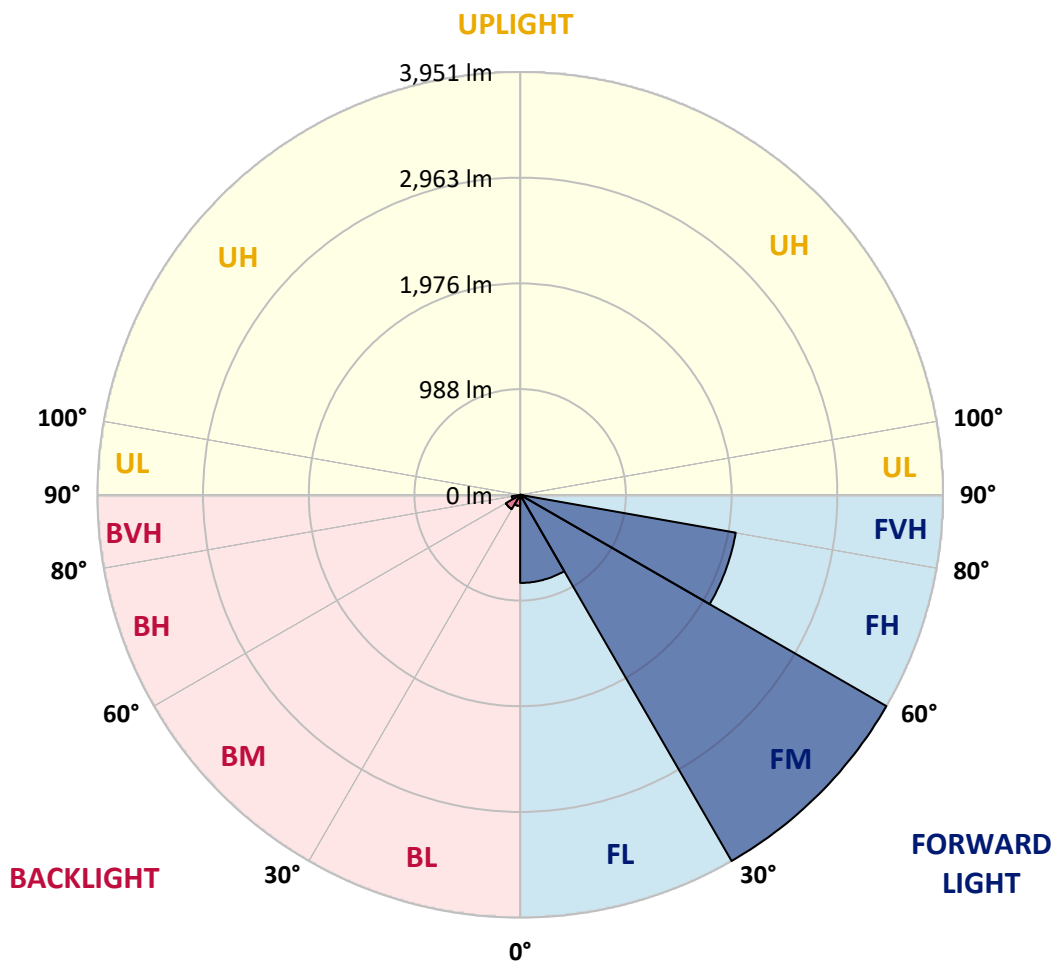
CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	823.6	11.5			
FM (30°-60°)	3951.3	55.0			
FH (60°-80°)	2045.1	28.5			G2/5000
FVH (80°-90°)	25.3	0.4			G1/100
BL (0°-30°)	103.9	1.4	B0/110		
BM (30°-60°)	154.7	2.2	B0/220		
BH (60°-80°)	79.8	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-G2

Type II Medium





REPORT NUMBER: P398166

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6
2.5°	1314.5	1307.3	1300.1	1272.6	1247.5	1224.8	1181.7	1125.5	1075.2	1064.5	1005.9
5°	1544.1	1535.7	1525.0	1497.5	1465.2	1426.9	1363.5	1277.4	1188.9	1169.7	1060.9
7.5°	1699.6	1692.4	1676.9	1663.7	1631.4	1594.3	1523.8	1423.3	1301.3	1277.4	1124.3
10°	1806.0	1801.3	1798.9	1788.1	1764.2	1734.3	1663.7	1558.5	1414.9	1387.4	1191.3
12.5°	1844.3	1844.3	1856.3	1874.2	1877.8	1868.2	1803.6	1698.4	1534.5	1505.8	1270.2
15°	1792.9	1798.9	1825.2	1882.6	1942.4	1981.9	1941.2	1843.1	1666.1	1635.0	1363.5
17.5°	1778.5	1784.5	1802.4	1852.7	1932.8	2038.1	2058.4	1983.1	1790.5	1764.2	1459.2
20°	1819.2	1825.2	1840.7	1883.8	1944.8	2051.2	2136.1	2118.2	1922.1	1894.5	1556.1
22.5°	1916.1	1919.7	1919.7	1953.2	2007.0	2085.9	2185.2	2246.2	2057.2	2027.3	1651.7
25°	2124.2	2117.0	2088.3	2071.6	2106.2	2170.8	2247.4	2358.6	2207.9	2167.2	1754.6
27.5°	2396.9	2420.8	2351.4	2271.3	2245.0	2282.1	2334.7	2457.9	2353.8	2310.8	1847.9
30°	2766.5	2756.9	2666.0	2551.2	2437.6	2424.4	2442.3	2542.8	2499.7	2459.1	1952.0
32.5°	3070.3	3088.2	2992.5	2852.6	2682.7	2602.6	2583.5	2644.5	2655.2	2628.9	2075.1
35°	3382.4	3401.6	3308.3	3152.8	2950.7	2816.7	2761.7	2770.1	2847.8	2814.3	2204.3
37.5°	3662.3	3679.1	3587.0	3427.9	3225.7	3061.9	2982.9	2918.4	3034.4	3004.5	2340.7
40°	3875.2	3877.6	3815.4	3673.1	3481.7	3311.9	3222.2	3095.4	3231.7	3211.4	2483.0
42.5°	4025.9	4030.7	3985.2	3863.2	3686.2	3528.3	3455.4	3304.7	3459.0	3441.0	2648.1
45°	4096.5	4104.8	4100.1	3987.6	3840.5	3704.2	3680.2	3527.2	3707.8	3691.0	2838.2
47.5°	4029.5	4029.5	4090.5	4074.9	3939.8	3848.9	3876.4	3759.2	3978.1	3962.5	3032.0
50°	3750.8	3754.4	3878.8	4057.0	3978.1	3957.7	4043.8	3986.4	4223.3	4232.8	3264.0
52.5°	3018.8	3012.9	3432.7	3774.7	3951.8	4006.8	4198.1	4218.5	4517.5	4546.2	3494.9
55°	2255.8	2252.2	2654.0	3274.8	3767.6	3981.7	4284.3	4425.4	4768.7	4786.6	3667.1
57.5°	1785.7	1776.1	1997.4	2639.7	3351.3	3869.2	4287.8	4464.9	4908.6	4939.7	3834.5
60°	1373.1	1364.7	1529.7	1963.9	2761.7	3570.2	4185.0	4467.2	5043.7	5098.8	4059.4
62.5°	982.0	991.5	1118.3	1408.9	2124.2	3148.0	4051.0	4500.7	5284.2	5346.3	4378.7
65°	662.6	657.8	763.1	959.2	1510.6	2579.9	3845.3	4571.3	5717.1	5826.0	4761.5
67.5°	460.5	464.1	511.9	624.3	959.2	1980.7	3503.2	4610.8	6164.4	6249.4	5029.4
70°	332.5	337.3	363.6	419.8	586.1	1343.2	2961.4	4430.2	6285.2	6359.4	4842.8
72.5°	218.9	228.4	267.9	297.8	374.4	840.8	2181.6	3816.6	5765.0	5820.0	4063.0
75°	118.4	120.8	172.2	222.5	266.7	523.9	1301.3	2573.9	4313.0	4295.0	2679.2
77.5°	92.1	95.7	106.4	159.1	179.4	288.2	514.3	1162.6	2042.9	1987.8	913.8
80°	56.2	58.6	74.2	94.5	125.6	167.4	150.7	315.8	415.0	388.7	134.0
82.5°	33.5	35.9	44.3	78.9	99.3	78.9	52.6	76.5	77.7	76.5	33.5
85°	6.0	6.0	31.1	55.0	52.6	22.7	31.1	25.1	22.7	23.9	7.2
87.5°	0.0	0.0	12.0	16.7	23.9	8.4	12.0	6.0	6.0	6.0	3.6
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: P398166

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6	961.6
2.5°	970.0	929.3	845.6	772.6	699.7	645.9	605.2	563.3	549.0	531.0	521.5
5°	986.7	906.6	740.4	607.6	495.2	409.0	354.0	320.5	299.0	283.5	279.9
7.5°	1011.9	888.7	655.4	476.0	352.8	266.7	221.3	198.5	186.6	179.4	177.0
10°	1041.8	873.1	571.7	370.8	248.8	187.8	162.7	153.1	148.3	145.9	144.7
12.5°	1083.6	867.1	501.1	285.9	187.8	154.3	141.1	135.2	131.6	128.0	126.8
15°	1138.6	869.5	436.6	221.3	155.5	137.5	126.8	120.8	116.0	112.4	112.4
17.5°	1196.1	873.1	373.2	179.4	141.1	125.6	113.6	105.3	101.7	98.1	96.9
20°	1249.9	871.9	312.2	153.1	128.0	112.4	100.5	92.1	86.1	82.5	82.5
22.5°	1301.3	864.7	254.8	137.5	117.2	99.3	86.1	77.7	73.0	69.4	69.4
25°	1356.3	850.4	208.1	125.6	104.1	87.3	74.2	65.8	62.2	58.6	58.6
27.5°	1399.4	826.5	169.8	114.8	92.1	75.4	63.4	56.2	52.6	50.2	50.2
30°	1446.0	791.8	141.1	102.9	80.1	64.6	53.8	47.8	44.3	43.1	43.1
32.5°	1497.5	753.5	120.8	90.9	68.2	55.0	45.4	41.9	38.3	37.1	37.1
35°	1557.3	720.0	108.8	78.9	59.8	46.6	39.5	35.9	33.5	33.5	33.5
37.5°	1625.4	685.3	98.1	69.4	51.4	39.5	33.5	32.3	31.1	29.9	29.9
40°	1699.6	648.3	88.5	61.0	44.3	33.5	28.7	28.7	27.5	27.5	27.5
42.5°	1783.3	616.0	80.1	53.8	38.3	28.7	25.1	25.1	23.9	23.9	23.9
45°	1874.2	586.1	73.0	47.8	33.5	25.1	22.7	21.5	20.3	20.3	20.3
47.5°	1981.9	569.3	67.0	41.9	28.7	21.5	19.1	17.9	16.7	15.5	15.5
50°	2119.4	576.5	61.0	34.7	25.1	17.9	15.5	14.4	13.2	12.0	12.0
52.5°	2228.2	572.9	52.6	29.9	20.3	14.4	12.0	10.8	9.6	8.4	8.4
55°	2307.2	558.6	45.4	25.1	15.5	12.0	9.6	7.2	6.0	6.0	6.0
57.5°	2384.9	544.2	38.3	20.3	12.0	8.4	6.0	4.8	4.8	4.8	4.8
60°	2505.7	523.9	33.5	16.7	9.6	6.0	3.6	3.6	2.4	2.4	2.4
62.5°	2652.8	498.8	27.5	14.4	7.2	4.8	2.4	2.4	0.0	0.0	0.0
65°	2814.3	454.5	22.7	10.8	6.0	3.6	2.4	0.0	0.0	0.0	0.0
67.5°	2777.2	364.8	19.1	7.2	4.8	2.4	1.2	0.0	0.0	0.0	0.0
70°	2456.7	246.4	15.5	6.0	3.6	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	1924.4	145.9	10.8	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1231.9	73.0	7.2	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	412.6	35.9	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.6	12.0	2.4	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.2	4.8	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	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)