

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: P398040

Luminaire Tested: **ARCH-S-PA1-80-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398040
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-PA1-80-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 7054 lumens
Efficiency: N/A
Efficacy: 85.0 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

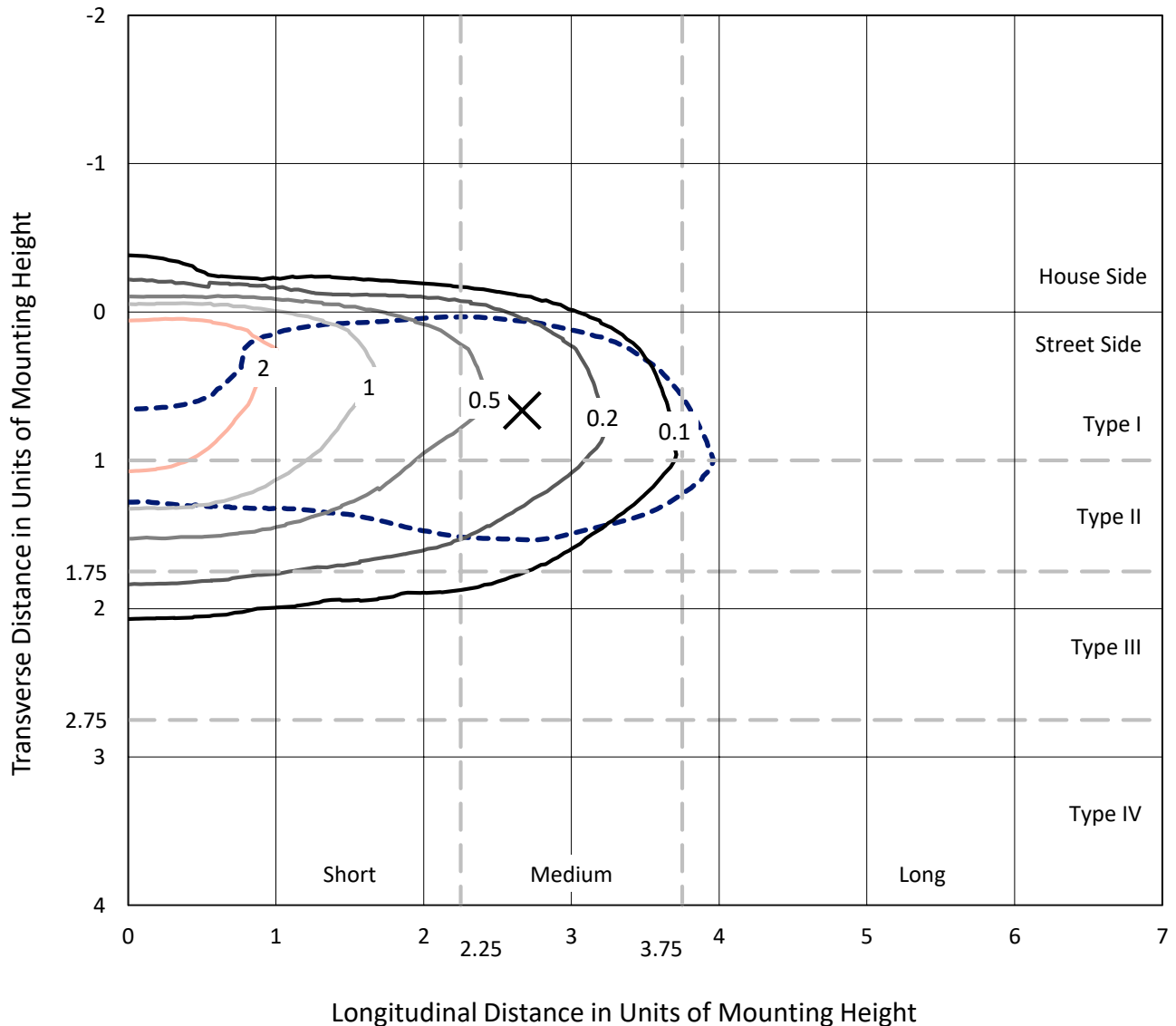
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

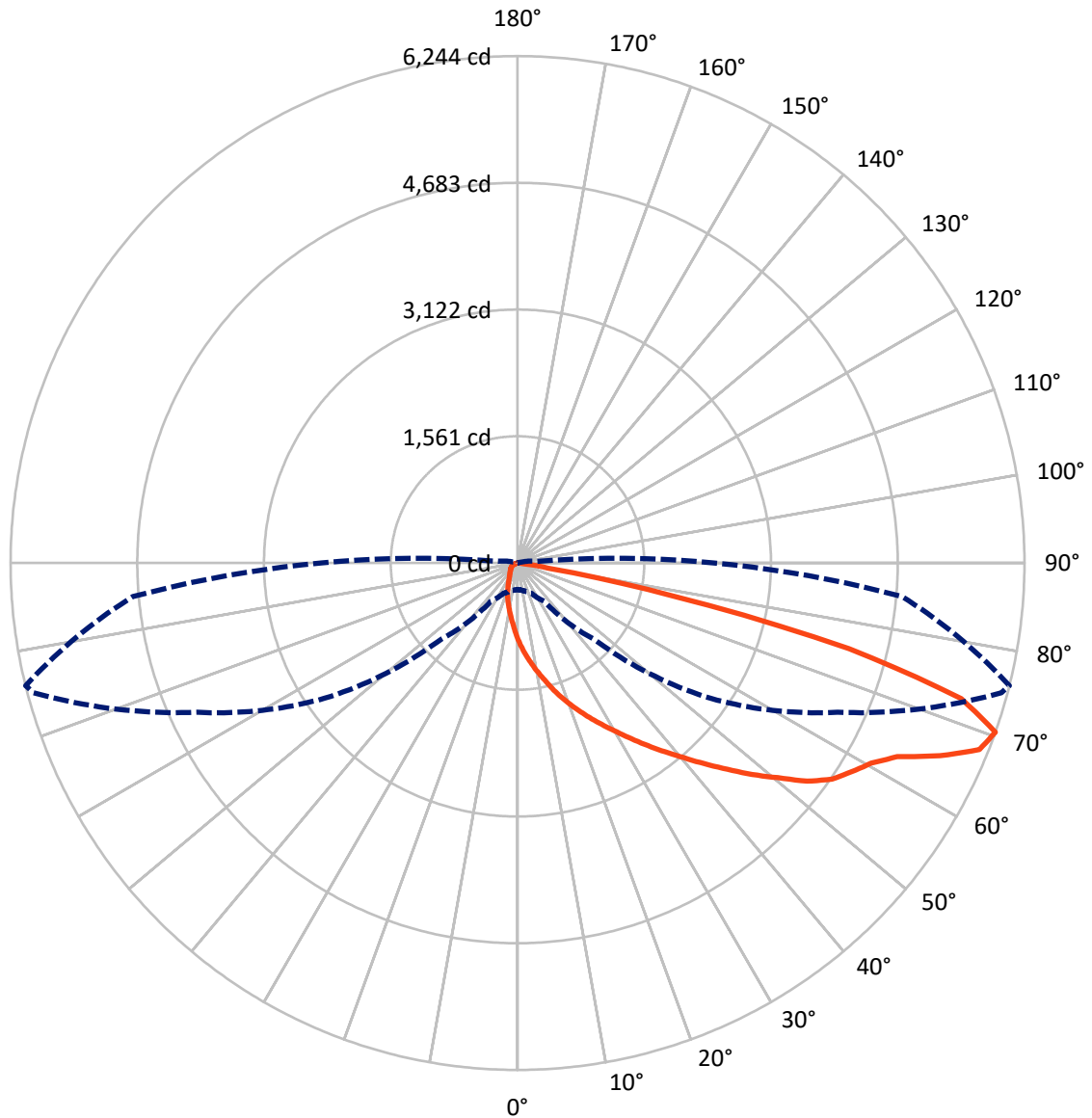
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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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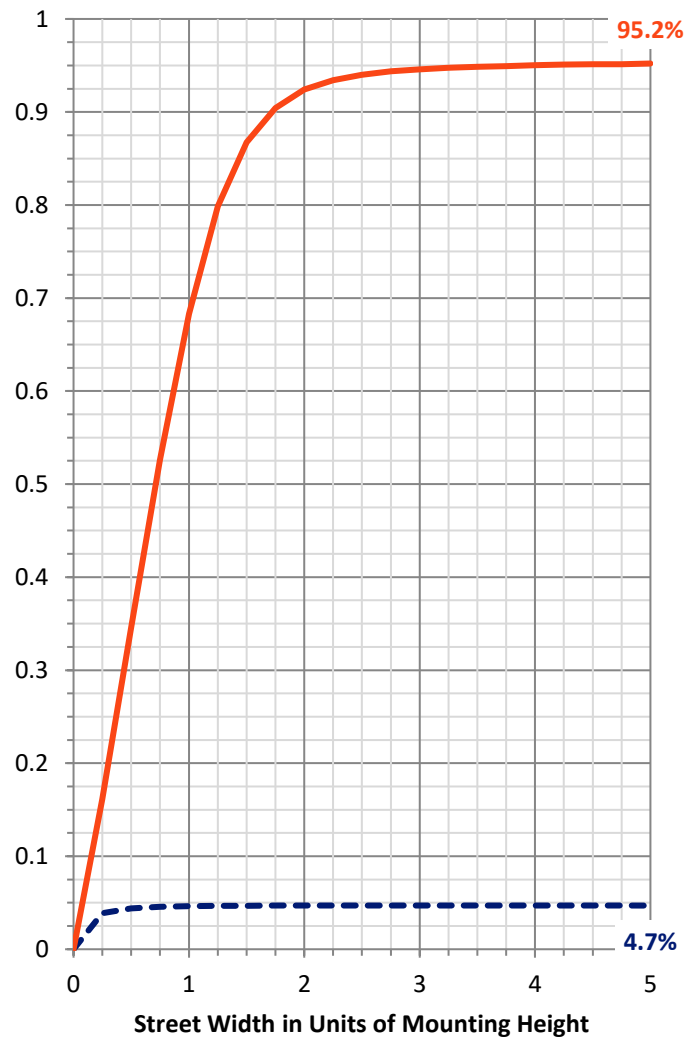
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	332.7	0.0	332.7
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	6721.3	0.0	6721.3
	% Fixture	95.3	0.0	95.3
Total	Lumens	7054.0	0.0	7054.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	1.3
10°-20°	287.1	4.1
20°-30°	534.7	7.6
30°-40°	945.7	13.4
40°-50°	1446.2	20.5
50°-60°	1639.7	23.2
60°-70°	1405.6	19.9
70°-80°	680.8	9.7
80°-90°	25.3	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°	7054.0	100.0
0°-180°	7054.0	100.0

Coefficient of Utilization



--- HS — SS

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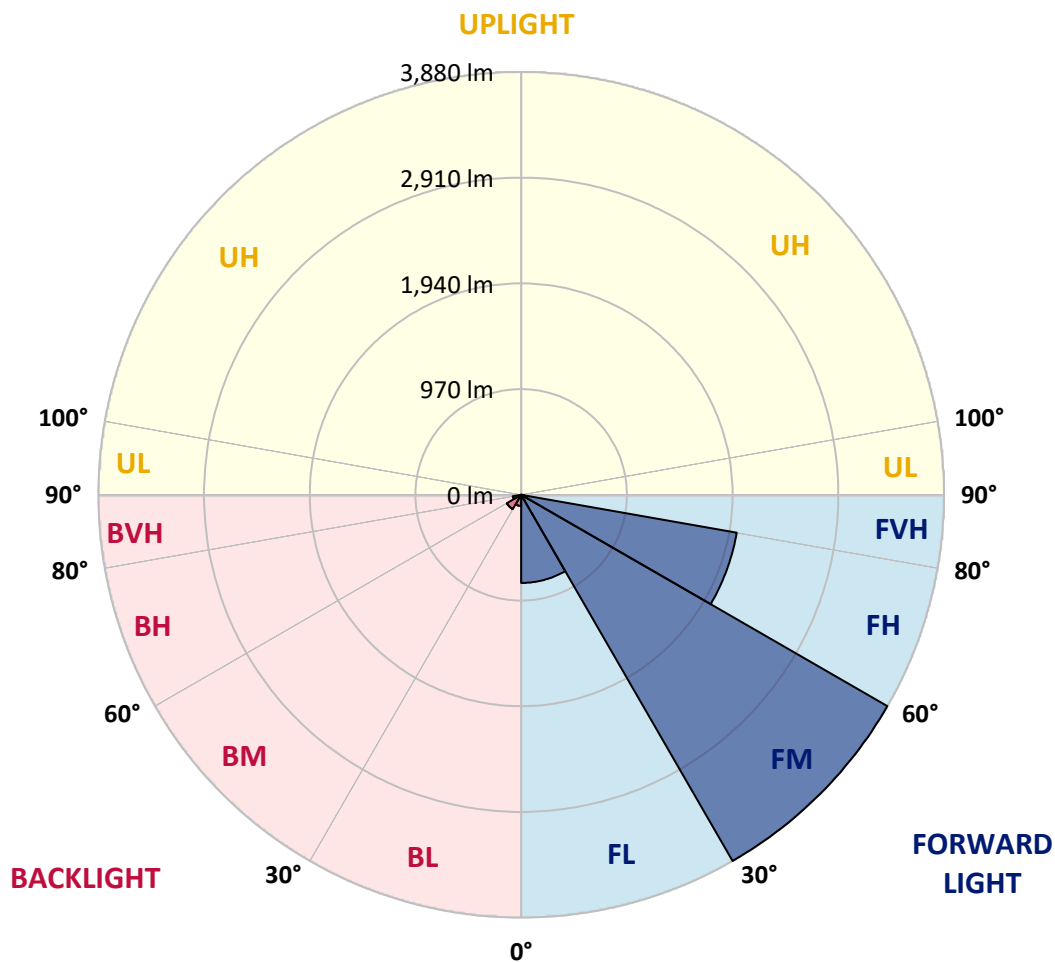
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	808.7	11.5			
FM	(30°-60°)	3879.8	55.0			
FH	(60°-80°)	2008.1	28.5			G2/5000
FVH	(80°-90°)	24.8	0.4			G1/100
BL	(0°-30°)	102.1	1.4	B0/110		
BM	(30°-60°)	151.9	2.2	B0/220		
BH	(60°-80°)	78.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2
2.5°	1290.7	1283.6	1276.6	1249.6	1224.9	1202.6	1160.3	1105.1	1055.8	1045.2	987.7
5°	1516.2	1507.9	1497.4	1470.4	1438.6	1401.1	1338.8	1254.3	1167.4	1148.6	1041.7
7.5°	1668.8	1661.8	1646.5	1633.6	1601.9	1565.5	1496.2	1397.5	1277.8	1254.3	1103.9
10°	1773.4	1768.7	1766.3	1755.7	1732.3	1702.9	1633.6	1530.3	1389.3	1362.3	1169.7
12.5°	1810.9	1810.9	1822.7	1840.3	1843.8	1834.4	1771.0	1667.7	1506.8	1478.6	1247.2
15°	1760.4	1766.3	1792.1	1848.5	1907.2	1946.0	1906.1	1809.8	1635.9	1605.4	1338.8
17.5°	1746.3	1752.2	1769.8	1819.2	1897.8	2001.2	2021.2	1947.2	1758.1	1732.3	1432.8
20°	1786.3	1792.1	1807.4	1849.7	1909.6	2014.1	2097.5	2079.9	1887.3	1860.3	1527.9
22.5°	1881.4	1884.9	1884.9	1917.8	1970.7	2048.2	2145.6	2205.5	2020.0	1990.6	1621.9
25°	2085.7	2078.7	2050.5	2034.1	2068.1	2131.5	2206.7	2315.9	2168.0	2128.0	1722.9
27.5°	2353.5	2377.0	2308.9	2230.2	2204.4	2240.8	2292.4	2413.4	2311.2	2269.0	1814.5
30°	2716.4	2707.0	2617.8	2505.0	2393.4	2380.5	2398.1	2496.8	2454.5	2414.6	1916.6
32.5°	3014.7	3032.3	2938.4	2801.0	2634.2	2555.5	2536.7	2596.6	2607.2	2581.3	2037.6
35°	3321.2	3340.0	3248.4	3095.7	2897.3	2765.7	2711.7	2719.9	2796.3	2763.4	2164.4
37.5°	3596.0	3612.5	3522.0	3365.9	3167.4	3006.5	2929.0	2865.6	2979.5	2950.1	2298.3
40°	3805.1	3807.4	3746.4	3606.6	3418.7	3251.9	3163.9	3039.4	3173.2	3153.3	2438.1
42.5°	3953.1	3957.8	3913.1	3793.3	3619.5	3464.5	3392.9	3244.9	3396.4	3378.8	2600.1
45°	4022.3	4030.6	4025.9	3915.5	3771.0	3637.1	3613.7	3463.3	3640.7	3624.2	2786.9
47.5°	3956.6	3956.6	4016.5	4001.2	3868.5	3779.2	3806.3	3691.2	3906.1	3890.8	2977.1
50°	3682.9	3686.5	3808.6	3983.6	3906.1	3886.1	3970.7	3914.3	4146.8	4156.2	3205.0
52.5°	2964.2	2958.3	3370.5	3706.4	3880.2	3934.3	4122.2	4142.1	4435.7	4463.9	3431.6
55°	2214.9	2211.4	2606.0	3215.5	3699.4	3909.6	4206.7	4345.3	4682.4	4700.0	3600.7
57.5°	1753.4	1744.0	1961.3	2591.9	3290.7	3799.2	4210.2	4384.1	4819.8	4850.3	3765.1
60°	1348.2	1340.0	1502.1	1928.4	2711.7	3505.6	4109.2	4386.4	4952.5	5006.5	3985.9
62.5°	964.2	973.6	1098.1	1383.5	2085.7	3091.0	3977.7	4419.3	5188.5	5249.6	4299.5
65°	650.6	645.9	749.3	941.9	1483.3	2533.2	3775.7	4488.6	5613.7	5720.5	4675.3
67.5°	452.1	455.7	502.6	613.0	941.9	1944.8	3439.8	4527.3	6052.9	6136.3	4938.4
70°	326.5	331.2	357.0	412.2	575.5	1318.9	2907.8	4350.0	6171.5	6244.3	4755.2
72.5°	214.9	224.3	263.1	292.4	367.6	825.6	2142.1	3747.5	5660.6	5714.7	3989.5
75°	116.3	118.6	169.1	218.4	261.9	514.4	1277.8	2527.3	4234.9	4217.3	2630.7
77.5°	90.4	94.0	104.5	156.2	176.2	283.0	505.0	1141.5	2005.9	1951.9	897.2
80°	55.2	57.5	72.8	92.8	123.3	164.4	148.0	310.0	407.5	381.7	131.5
82.5°	32.9	35.2	43.5	77.5	97.5	77.5	51.7	75.2	76.3	75.2	32.9
85°	5.9	5.9	30.5	54.0	51.7	22.3	30.5	24.7	22.3	23.5	7.0
87.5°	0.0	0.0	11.7	16.4	23.5	8.2	11.7	5.9	5.9	5.9	3.5
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°	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2	944.2
2.5°	952.4	912.5	830.3	758.7	687.0	634.2	594.2	553.1	539.1	521.4	512.0
5°	968.9	890.2	727.0	596.6	486.2	401.6	347.6	314.7	293.6	278.3	274.8
7.5°	993.5	872.6	643.6	467.4	346.5	261.9	217.3	195.0	183.2	176.2	173.8
10°	1022.9	857.3	561.4	364.1	244.3	184.4	159.7	150.3	145.6	143.3	142.1
12.5°	1064.0	851.4	492.1	280.7	184.4	151.5	138.6	132.7	129.2	125.7	124.5
15°	1118.0	853.8	428.7	217.3	152.7	135.1	124.5	118.6	113.9	110.4	110.4
17.5°	1174.4	857.3	366.4	176.2	138.6	123.3	111.6	103.3	99.8	96.3	95.1
20°	1227.3	856.1	306.5	150.3	125.7	110.4	98.7	90.4	84.6	81.0	81.0
22.5°	1277.8	849.1	250.1	135.1	115.1	97.5	84.6	76.3	71.6	68.1	68.1
25°	1331.8	835.0	204.3	123.3	102.2	85.7	72.8	64.6	61.1	57.5	57.5
27.5°	1374.1	811.5	166.8	112.7	90.4	74.0	62.2	55.2	51.7	49.3	49.3
30°	1419.9	777.5	138.6	101.0	78.7	63.4	52.8	47.0	43.5	42.3	42.3
32.5°	1470.4	739.9	118.6	89.3	66.9	54.0	44.6	41.1	37.6	36.4	36.4
35°	1529.1	707.0	106.9	77.5	58.7	45.8	38.8	35.2	32.9	32.9	32.9
37.5°	1596.0	672.9	96.3	68.1	50.5	38.8	32.9	31.7	30.5	29.4	29.4
40°	1668.8	636.5	86.9	59.9	43.5	32.9	28.2	28.2	27.0	27.0	27.0
42.5°	1751.0	604.8	78.7	52.8	37.6	28.2	24.7	24.7	23.5	23.5	23.5
45°	1840.3	575.5	71.6	47.0	32.9	24.7	22.3	21.1	20.0	20.0	20.0
47.5°	1946.0	559.0	65.8	41.1	28.2	21.1	18.8	17.6	16.4	15.3	15.3
50°	2081.0	566.1	59.9	34.1	24.7	17.6	15.3	14.1	12.9	11.7	11.7
52.5°	2187.9	562.5	51.7	29.4	20.0	14.1	11.7	10.6	9.4	8.2	8.2
55°	2265.4	548.4	44.6	24.7	15.3	11.7	9.4	7.0	5.9	5.9	5.9
57.5°	2341.8	534.4	37.6	20.0	11.7	8.2	5.9	4.7	4.7	4.7	4.7
60°	2460.4	514.4	32.9	16.4	9.4	5.9	3.5	3.5	2.3	2.3	2.3
62.5°	2604.8	489.7	27.0	14.1	7.0	4.7	2.3	2.3	0.0	0.0	0.0
65°	2763.4	446.3	22.3	10.6	5.9	3.5	2.3	0.0	0.0	0.0	0.0
67.5°	2727.0	358.2	18.8	7.0	4.7	2.3	1.2	0.0	0.0	0.0	0.0
70°	2412.2	241.9	15.3	5.9	3.5	2.3	1.2	0.0	0.0	0.0	0.0
72.5°	1889.6	143.3	10.6	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0
75°	1209.6	71.6	7.0	3.5	2.3	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	405.2	35.2	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	57.5	11.7	2.3	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.9	4.7	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	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)