

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: P214651

Luminaire Tested: **ARCH-AF24-100-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-100-D-U-T2R-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1200mA 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: 6804 lumens
Efficiency: N/A
Efficacy: 70.9 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 - G2

Input Watts (W): 96
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

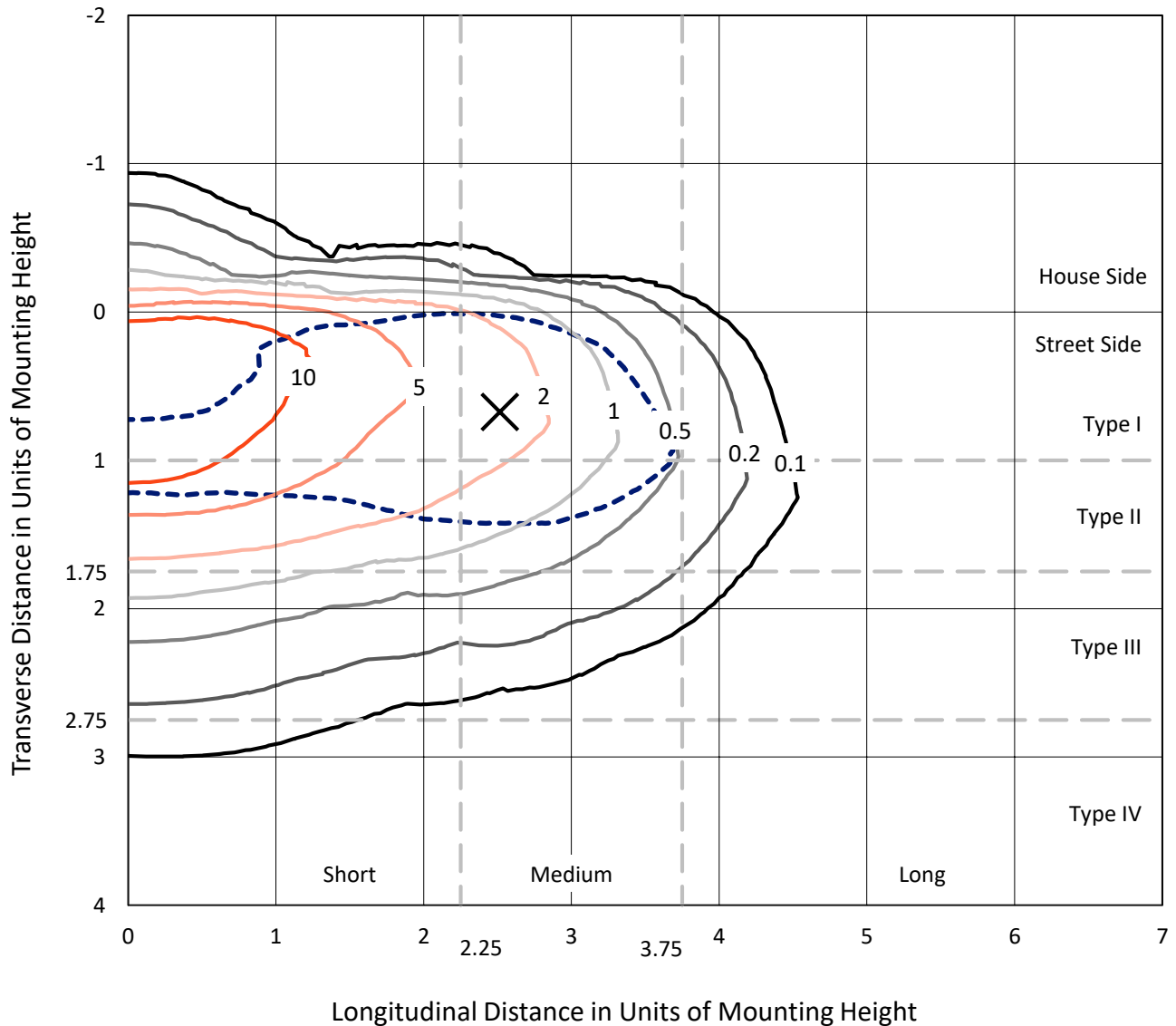


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

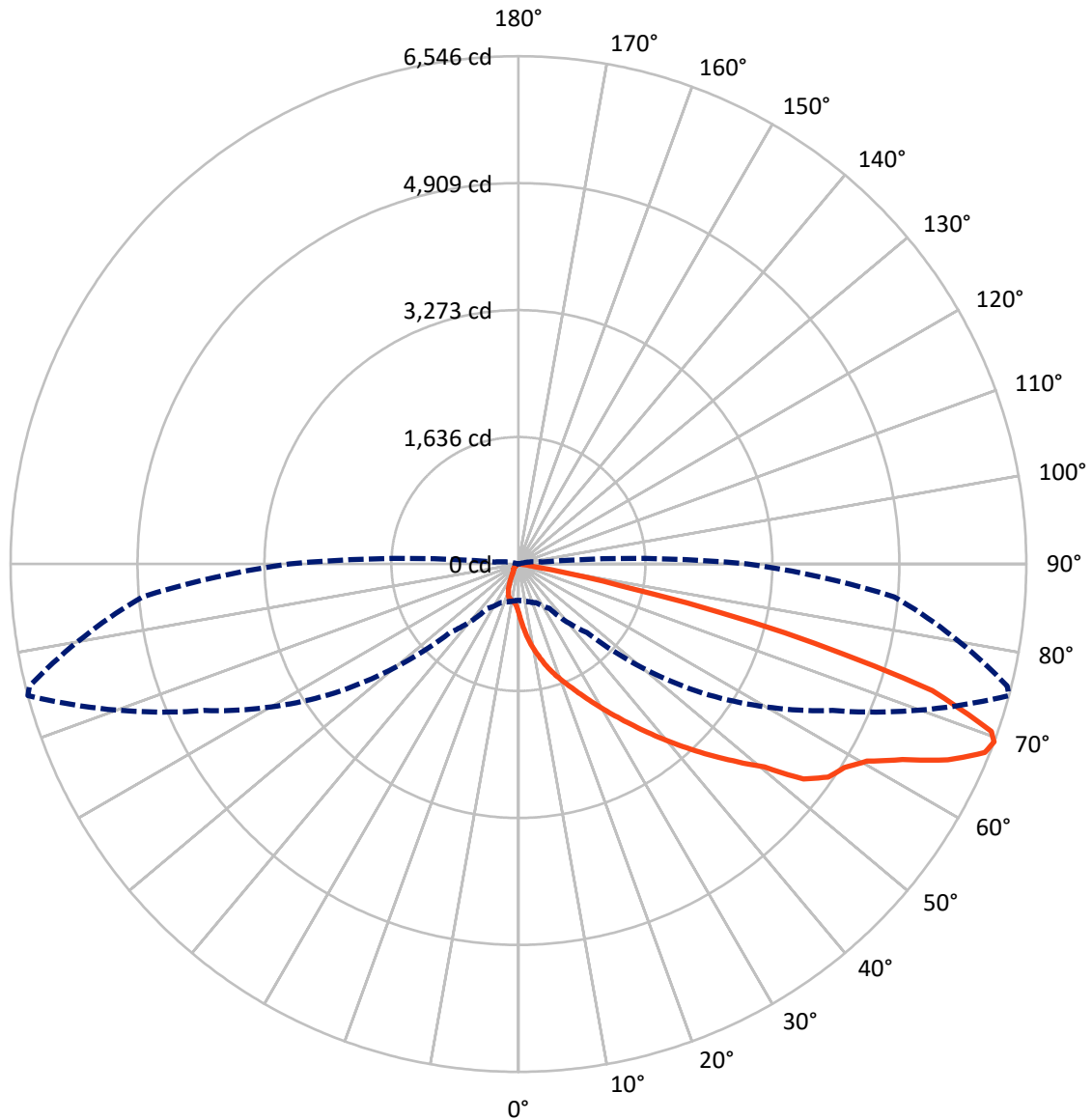


Based on 10 foot mounting height. Maximum calculated value = 17.3 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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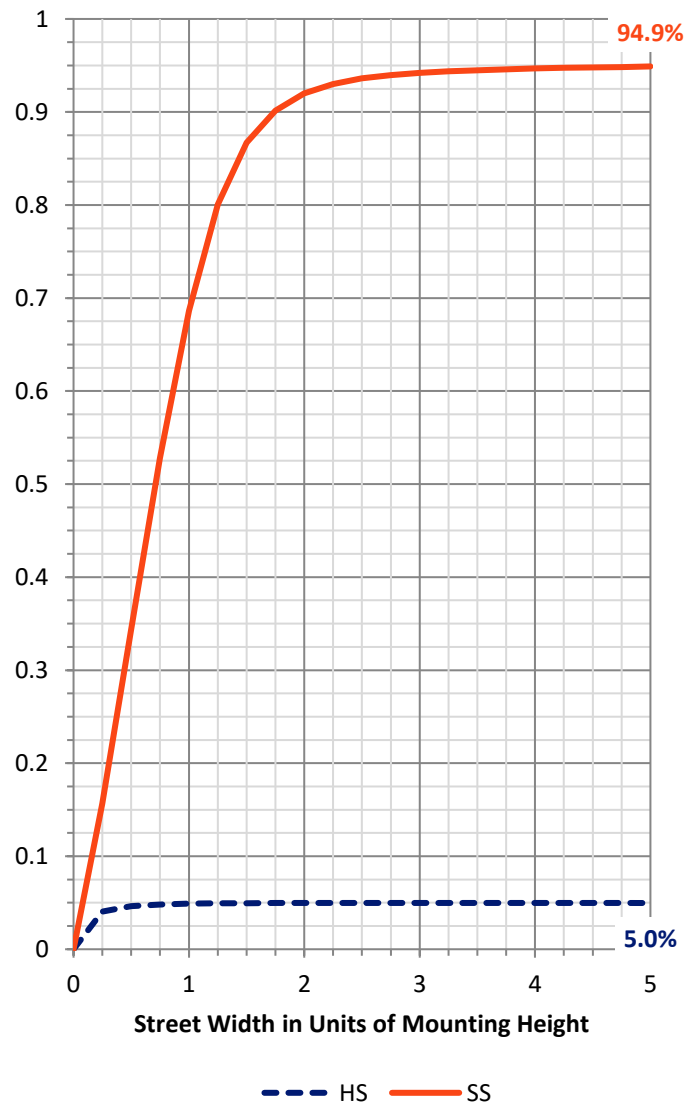
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	339.5	0.0	339.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6464.5	0.0	6464.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	6804.0	0.0	6804.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	1.1
10°-20°	263.9	3.9
20°-30°	503.9	7.4
30°-40°	903.8	13.3
40°-50°	1384.7	20.4
50°-60°	1609.4	23.7
60°-70°	1425.1	20.9
70°-80°	614.7	9.0
80°-90°	24.6	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°	6804.0	100.0
0°-180°	6804.0	100.0



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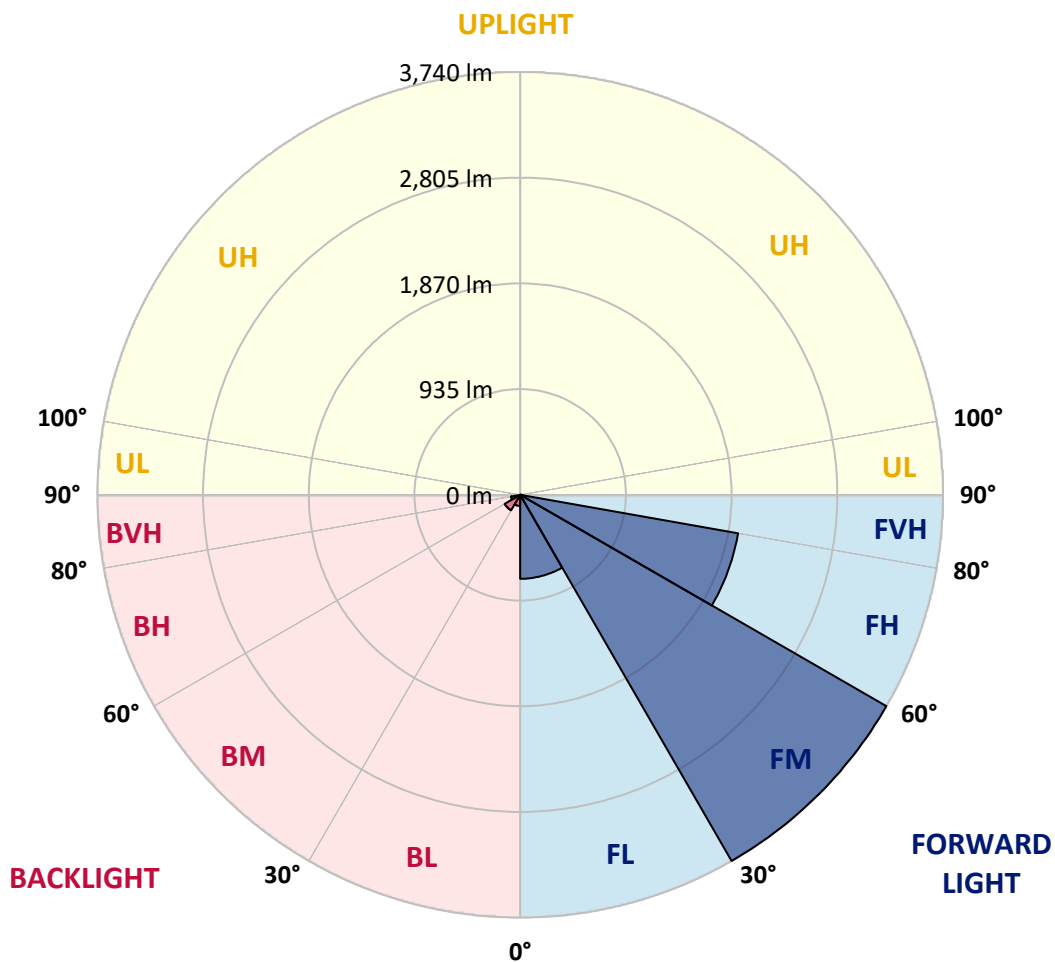
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	743.0	10.9			
FM	(30°-60°)	3739.6	55.0			
FH	(60°-80°)	1957.6	28.8			G2/5000
FVH	(80°-90°)	24.3	0.4			G1/100
BL	(0°-30°)	98.6	1.4	B0/110		
BM	(30°-60°)	158.3	2.3	B0/220		
BH	(60°-80°)	82.2	1.2	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°	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1
2.5°	1042.9	1032.7	1022.4	1010.6	984.2	938.6	881.4	819.7	743.3	730.1	668.4
5°	1266.2	1261.8	1251.5	1235.4	1206.0	1156.0	1091.4	1000.3	872.5	850.5	719.8
7.5°	1423.4	1420.5	1411.6	1392.5	1366.1	1316.2	1248.6	1150.2	1001.8	976.8	784.4
10°	1564.4	1562.9	1555.6	1538.0	1511.5	1457.2	1385.2	1282.4	1125.2	1097.3	859.3
12.5°	1692.2	1693.7	1690.7	1681.9	1662.8	1611.4	1529.2	1417.5	1244.2	1213.3	948.9
15°	1767.1	1771.5	1783.3	1800.9	1806.8	1765.7	1680.5	1557.1	1366.1	1339.7	1051.8
17.5°	1742.2	1746.6	1783.3	1843.5	1900.8	1906.7	1830.3	1689.3	1486.6	1460.1	1153.1
20°	1681.9	1687.8	1726.0	1808.3	1919.9	1997.7	1966.9	1833.2	1601.1	1568.8	1250.1
22.5°	1749.5	1749.5	1761.2	1811.2	1912.5	2034.5	2075.6	1977.2	1718.7	1679.0	1347.0
25°	1981.6	1977.2	1952.2	1931.6	1964.0	2072.7	2157.9	2124.1	1856.7	1811.2	1449.8
27.5°	2275.4	2295.9	2248.9	2174.0	2100.6	2147.6	2231.3	2269.5	2009.5	1962.5	1555.6
30°	2604.4	2613.2	2557.4	2457.5	2328.3	2282.7	2318.0	2394.4	2175.5	2124.1	1665.8
32.5°	2901.1	2893.8	2846.8	2742.5	2582.4	2484.0	2429.6	2494.2	2356.2	2297.4	1778.9
35°	3164.1	3170.0	3112.7	2992.2	2835.0	2730.7	2601.5	2607.4	2558.9	2491.3	1909.6
37.5°	3400.6	3390.3	3335.9	3215.5	3073.0	2959.9	2823.3	2724.9	2780.7	2710.2	2056.5
40°	3593.0	3582.7	3525.4	3407.9	3274.2	3181.7	3074.5	2882.0	3014.2	2933.5	2213.7
42.5°	3745.8	3734.0	3685.6	3572.4	3443.2	3360.9	3309.5	3075.9	3264.0	3183.2	2390.0
45°	3820.7	3810.4	3781.0	3695.8	3582.7	3510.7	3535.7	3299.2	3531.3	3463.7	2583.9
47.5°	3732.6	3728.1	3761.9	3747.2	3682.6	3644.4	3731.1	3543.1	3811.9	3745.8	2807.1
50°	3465.2	3472.6	3571.0	3692.9	3723.7	3769.3	3891.2	3800.1	4113.0	4042.5	3064.2
52.5°	2805.7	2855.6	3152.3	3446.1	3673.8	3845.7	4079.2	4167.4	4603.6	4534.6	3465.2
55°	2094.7	2115.3	2438.4	2940.8	3472.6	3839.8	4218.8	4383.3	4846.0	4775.5	3571.0
57.5°	1661.4	1668.7	1828.8	2341.5	3058.3	3707.6	4292.2	4461.1	4951.8	4893.0	3728.1
60°	1304.4	1313.2	1429.3	1781.8	2475.2	3350.6	4186.5	4528.7	5158.9	5111.9	4002.8
62.5°	1015.0	1023.8	1094.4	1301.5	1856.7	2801.3	3973.5	4637.4	5552.6	5530.5	4452.3
65°	785.9	788.8	837.3	934.2	1311.8	2206.3	3713.5	4738.8	6084.3	6065.2	4816.6
67.5°	580.2	584.6	618.4	678.6	885.8	1585.0	3287.5	4660.9	6485.3	6429.5	4948.8
69°	468.6	473.0	502.4	550.8	699.2	1248.6	2898.2	4468.5	6545.6	6492.7	4865.1
70°	401.0	404.0	433.3	474.5	596.4	1060.6	2589.7	4302.5	6466.2	6414.8	4674.1
72.5°	257.1	271.8	301.1	327.6	395.1	702.1	1748.0	3568.0	5579.0	5490.9	3660.6
75°	142.5	146.9	199.8	232.1	262.9	456.8	972.4	2225.4	3548.9	3487.2	1958.1
77.5°	117.5	120.5	141.0	176.3	176.3	255.6	367.2	877.0	1349.9	1217.7	530.3
80°	82.3	85.2	107.2	116.0	126.3	144.0	119.0	192.4	208.6	185.1	79.3
82.5°	57.3	60.2	73.4	95.5	101.4	67.6	44.1	57.3	60.2	60.2	30.8
85°	10.3	14.7	54.4	79.3	60.2	20.6	25.0	20.6	19.1	20.6	7.3
87.5°	0.0	0.0	33.8	38.2	32.3	8.8	10.3	7.3	4.4	5.9	2.9
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°	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1	633.1
2.5°	637.5	606.7	553.8	515.6	483.3	458.3	448.0	431.9	420.1	426.0	418.6
5°	655.1	600.8	515.6	461.2	423.1	390.7	364.3	343.7	327.6	324.6	321.7
7.5°	683.1	605.2	493.6	426.0	368.7	318.8	277.6	246.8	223.3	223.3	214.5
10°	721.2	617.0	480.3	390.7	305.5	238.0	196.8	167.5	155.7	154.2	151.3
12.5°	774.1	639.0	470.1	345.2	238.0	173.3	148.4	138.1	133.7	132.2	130.7
15°	846.1	671.3	458.3	289.4	180.7	142.5	132.2	123.4	119.0	117.5	116.0
17.5°	915.1	700.7	433.3	232.1	146.9	129.3	117.5	110.2	104.3	102.8	102.8
20°	979.8	725.7	390.7	180.7	132.2	116.0	104.3	95.5	89.6	88.1	88.1
22.5°	1047.3	746.2	337.9	146.9	120.5	102.8	91.1	82.3	76.4	74.9	73.4
25°	1119.3	760.9	277.6	130.7	108.7	91.1	77.9	70.5	66.1	64.6	63.2
27.5°	1197.2	766.8	220.3	119.0	95.5	79.3	67.6	60.2	57.3	55.8	55.8
30°	1267.7	760.9	170.4	105.8	83.7	69.0	58.8	52.9	49.9	48.5	48.5
32.5°	1341.1	746.2	136.6	94.0	73.4	58.8	49.9	45.5	44.1	42.6	42.6
35°	1419.0	727.1	117.5	83.7	63.2	51.4	44.1	41.1	39.7	38.2	38.2
37.5°	1510.1	703.6	107.2	74.9	55.8	45.5	38.2	36.7	35.3	35.3	35.3
40°	1612.9	674.2	99.9	67.6	49.9	39.7	33.8	32.3	30.8	30.8	30.8
42.5°	1721.6	640.5	92.5	60.2	44.1	33.8	29.4	29.4	27.9	27.9	26.4
45°	1843.5	606.7	85.2	52.9	38.2	29.4	25.0	23.5	23.5	22.0	22.0
47.5°	1987.5	575.8	77.9	47.0	33.8	25.0	22.0	20.6	19.1	17.6	17.6
50°	2190.2	572.9	69.0	41.1	30.8	20.6	17.6	16.2	14.7	13.2	13.2
52.5°	2391.4	546.4	58.8	33.8	25.0	17.6	13.2	11.8	10.3	10.3	8.8
55°	2437.0	502.4	51.4	29.4	19.1	13.2	10.3	7.3	7.3	5.9	5.9
57.5°	2536.8	481.8	44.1	23.5	14.7	10.3	5.9	4.4	4.4	4.4	4.4
60°	2733.7	475.9	38.2	20.6	10.3	7.3	4.4	2.9	2.9	1.5	1.5
62.5°	3005.4	470.1	32.3	17.6	7.3	4.4	2.9	1.5	0.0	0.0	0.0
65°	3155.3	430.4	26.4	13.2	5.9	4.4	1.5	0.0	0.0	0.0	0.0
67.5°	3115.6	355.5	23.5	8.8	4.4	2.9	1.5	0.0	0.0	0.0	0.0
69°	2949.6	299.7	19.1	7.3	4.4	2.9	1.5	0.0	0.0	0.0	0.0
70°	2749.8	258.5	17.6	5.9	2.9	1.5	1.5	0.0	0.0	0.0	0.0
72.5°	1952.2	135.1	11.8	4.4	2.9	1.5	0.0	0.0	0.0	0.0	0.0
75°	912.2	60.2	7.3	2.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	201.2	27.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	38.2	10.3	2.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.2	4.4	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.0	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)