

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: P214663

Luminaire Tested: **ARCH-AF24-80-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214663
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-AF24-80-D-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 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: 7260.9 lumens
Efficiency: N/A
Efficacy: 87.5 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

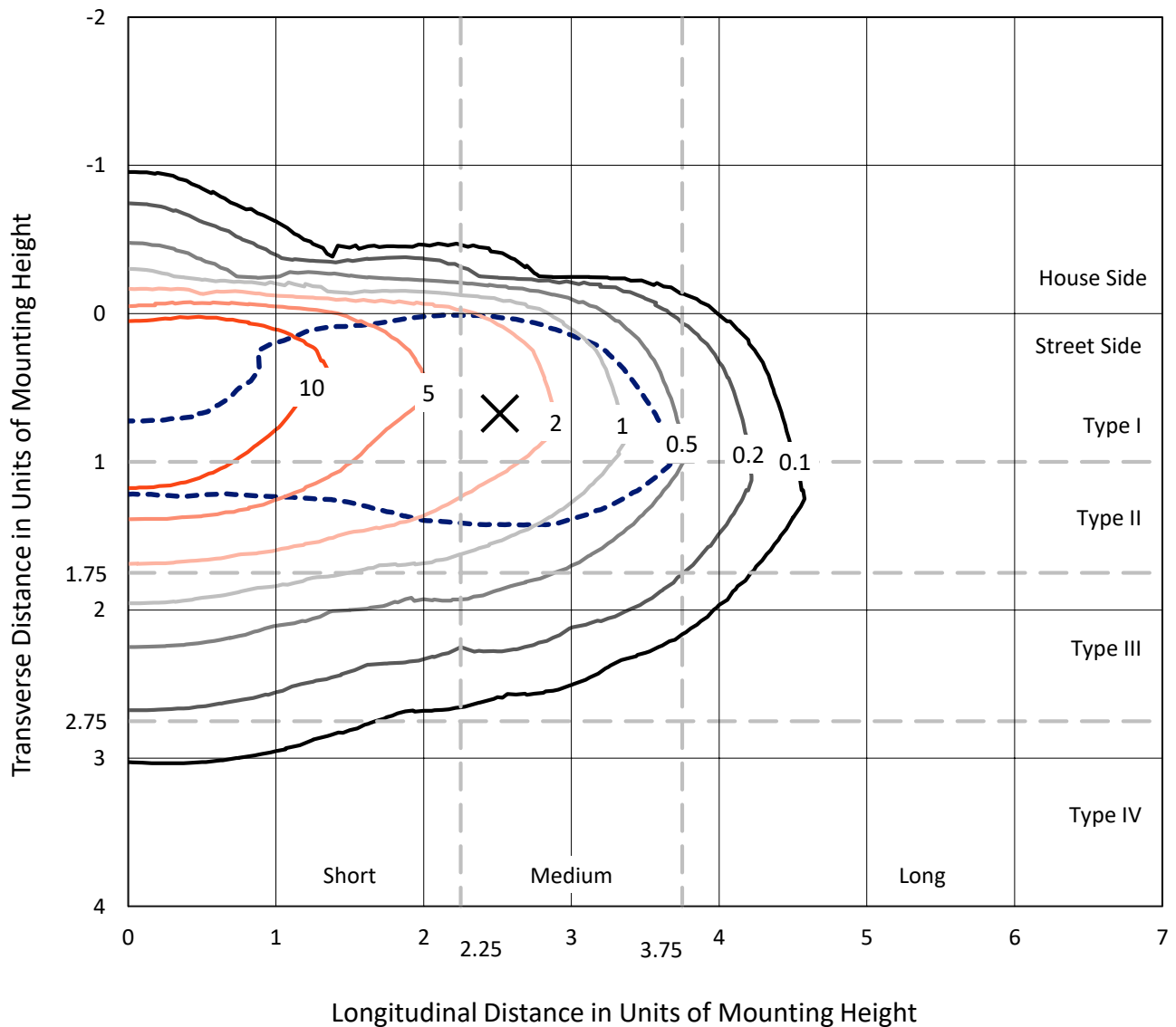
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

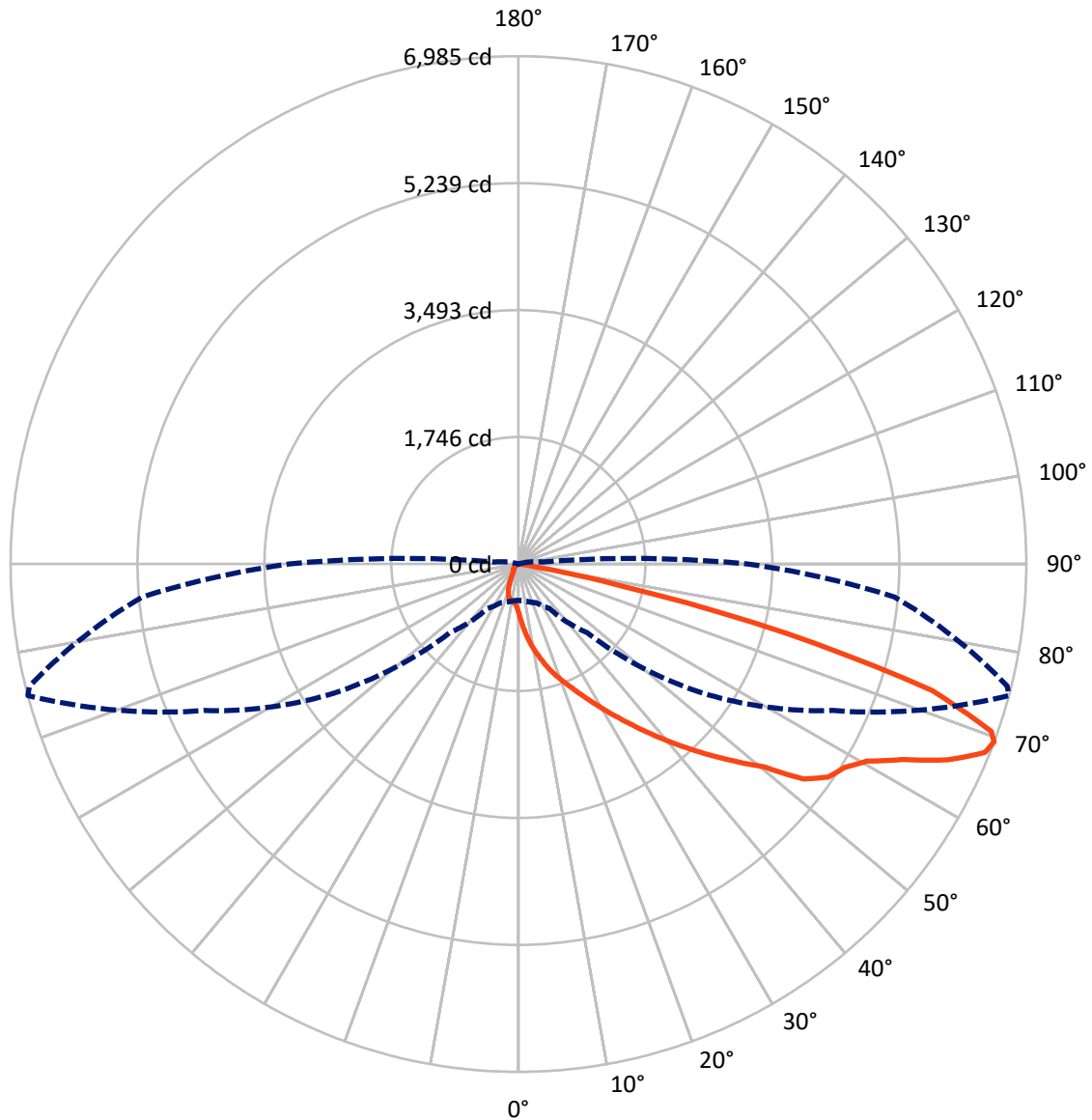
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.5 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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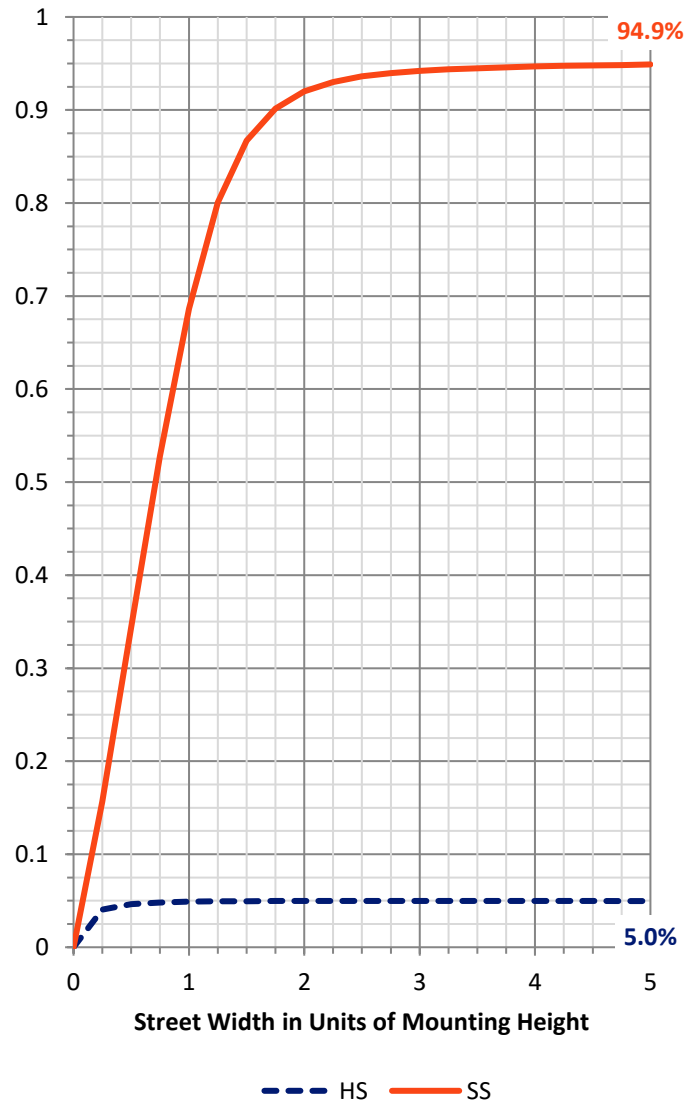
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.3	0.0	362.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6898.6	0.0	6898.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	7260.9	0.0	7260.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	1.1
10°-20°	281.6	3.9
20°-30°	537.7	7.4
30°-40°	964.5	13.3
40°-50°	1477.7	20.4
50°-60°	1717.5	23.7
60°-70°	1520.8	20.9
70°-80°	656.0	9.0
80°-90°	26.3	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°	7260.9	100.0
0°-180°	7260.9	100.0

Coefficient of Utilization



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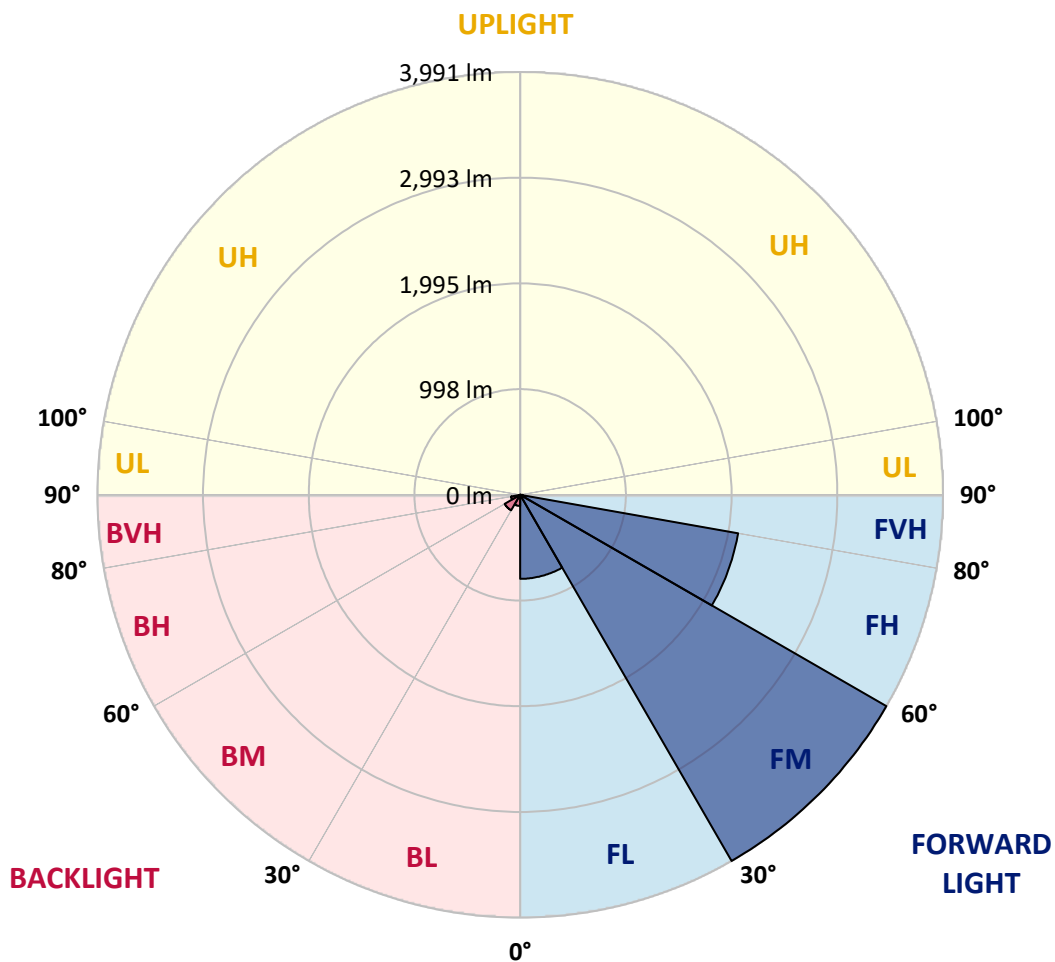
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	792.9	10.9			
FM (30°-60°)	3990.8	55.0			
FH (60°-80°)	2089.1	28.8			G2/5000
FVH (80°-90°)	25.9	0.4			G1/100
BL (0°-30°)	105.2	1.4	B0/110		
BM (30°-60°)	168.9	2.3	B0/220		
BH (60°-80°)	87.8	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°	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7
2.5°	1113.0	1102.0	1091.1	1078.5	1050.3	1001.7	940.5	874.7	793.2	779.1	713.2
5°	1351.2	1346.5	1335.6	1318.4	1287.0	1233.7	1164.7	1067.6	931.1	907.7	768.1
7.5°	1519.0	1515.8	1506.4	1486.0	1457.8	1404.5	1332.4	1227.4	1069.1	1042.4	837.1
10°	1669.5	1667.9	1660.0	1641.2	1613.0	1555.0	1478.3	1368.5	1200.7	1171.0	917.1
12.5°	1805.8	1807.5	1804.3	1794.9	1774.5	1719.6	1631.8	1512.7	1327.7	1294.9	1012.6
15°	1885.8	1890.5	1903.0	1921.8	1928.2	1884.2	1793.3	1661.6	1457.8	1429.7	1122.4
17.5°	1859.1	1863.8	1903.0	1967.3	2028.4	2034.8	1953.2	1802.7	1586.4	1558.2	1230.5
20°	1794.9	1801.1	1841.9	1929.7	2048.9	2131.9	2099.0	1956.3	1708.6	1674.2	1334.0
22.5°	1867.0	1867.0	1879.6	1932.9	2041.0	2171.1	2215.0	2109.9	1834.0	1791.7	1437.5
25°	2114.6	2109.9	2083.3	2061.3	2095.8	2211.8	2302.8	2266.8	1981.5	1932.9	1547.2
27.5°	2428.2	2450.1	2399.9	2320.1	2241.6	2291.8	2381.1	2421.9	2144.4	2094.3	1660.0
30°	2779.4	2788.7	2729.1	2622.5	2484.6	2436.1	2473.6	2555.1	2321.6	2266.8	1777.6
32.5°	3096.0	3088.1	3038.0	2926.7	2755.8	2650.8	2592.8	2661.7	2514.4	2451.7	1898.3
35°	3376.6	3382.8	3321.7	3193.1	3025.4	2914.1	2776.2	2782.4	2730.7	2658.6	2037.8
37.5°	3628.9	3618.0	3560.0	3431.4	3279.4	3158.7	3012.9	2907.8	2967.4	2892.2	2194.6
40°	3834.3	3823.3	3762.2	3636.8	3494.1	3395.4	3280.9	3075.6	3216.7	3130.4	2362.3
42.5°	3997.3	3984.8	3933.0	3812.3	3674.4	3586.6	3531.7	3282.5	3483.1	3396.9	2550.4
45°	4077.3	4066.3	4034.9	3944.0	3823.3	3746.5	3773.2	3520.8	3768.4	3696.3	2757.4
47.5°	3983.2	3978.5	4014.6	3998.9	3929.9	3889.2	3981.6	3781.0	4067.9	3997.3	2995.6
50°	3697.9	3705.7	3810.8	3940.9	3973.8	4022.3	4152.5	4055.3	4389.2	4314.0	3270.0
52.5°	2994.1	3047.4	3364.0	3677.5	3920.5	4103.9	4353.2	4447.2	4912.8	4839.1	3697.9
55°	2235.4	2257.3	2602.2	3138.3	3705.7	4097.6	4502.1	4677.6	5171.4	5096.1	3810.8
57.5°	1772.9	1780.8	1951.6	2498.8	3263.7	3956.6	4580.5	4760.7	5284.3	5221.6	3978.5
60°	1392.0	1401.4	1525.2	1901.5	2641.4	3575.6	4467.6	4832.8	5505.3	5455.2	4271.6
62.5°	1083.2	1092.6	1167.8	1388.9	1981.5	2989.4	4240.3	4948.8	5925.4	5901.9	4751.3
65°	838.6	841.8	893.5	997.0	1399.8	2354.5	3962.8	5057.0	6492.9	6472.5	5140.1
67.5°	619.2	623.9	659.9	724.2	945.2	1691.4	3508.2	4973.9	6920.9	6861.2	5281.2
69°	500.0	504.7	536.1	587.9	746.1	1332.4	3092.8	4768.6	6985.1	6928.7	5191.8
70°	427.9	431.1	462.5	506.4	636.5	1131.8	2763.6	4591.4	6900.4	6845.6	4988.0
72.5°	274.4	290.0	321.3	349.5	421.7	749.3	1865.5	3807.6	5953.7	5859.6	3906.4
75°	152.0	156.7	213.2	247.7	280.6	487.5	1037.8	2374.9	3787.3	3721.4	2089.6
77.5°	125.4	128.6	150.5	188.1	188.1	272.7	391.9	935.8	1440.6	1299.6	565.9
80°	87.8	90.9	114.5	123.9	134.8	153.6	126.9	205.3	222.6	197.5	84.6
82.5°	61.2	64.2	78.4	101.9	108.1	72.1	47.1	61.2	64.2	64.2	32.9
85°	10.9	15.7	58.0	84.6	64.2	22.0	26.7	22.0	20.4	22.0	7.9
87.5°	0.0	0.0	36.0	40.7	34.5	9.4	10.9	7.9	4.7	6.2	3.2
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°	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7	675.7
2.5°	680.4	647.4	591.0	550.2	515.8	489.1	478.1	460.8	448.4	454.6	446.7
5°	699.2	641.2	550.2	492.2	451.4	417.0	388.7	366.8	349.5	346.5	343.3
7.5°	729.0	645.9	526.7	454.6	393.4	340.1	296.2	263.3	238.2	238.2	228.8
10°	769.7	658.4	512.6	417.0	326.0	253.9	210.0	178.7	166.1	164.6	161.4
12.5°	826.1	681.9	501.7	368.4	253.9	184.9	158.4	147.3	142.6	141.1	139.5
15°	903.0	716.4	489.1	308.8	192.8	152.0	141.1	131.7	126.9	125.4	123.9
17.5°	976.6	747.8	462.5	247.7	156.7	138.0	125.4	117.5	111.3	109.8	109.8
20°	1045.6	774.4	417.0	192.8	141.1	123.9	111.3	101.9	95.6	94.0	94.0
22.5°	1117.7	796.4	360.6	156.7	128.6	109.8	97.2	87.8	81.5	80.0	78.4
25°	1194.5	812.0	296.2	139.5	116.0	97.2	83.1	75.3	70.6	68.9	67.4
27.5°	1277.6	818.3	235.2	126.9	101.9	84.6	72.1	64.2	61.2	59.5	59.5
30°	1352.9	812.0	181.9	112.8	89.3	73.7	62.7	56.5	53.3	51.8	51.8
32.5°	1431.2	796.4	145.8	100.4	78.4	62.7	53.3	48.6	47.1	45.4	45.4
35°	1514.3	775.9	125.4	89.3	67.4	54.8	47.1	43.9	42.4	40.7	40.7
37.5°	1611.5	750.8	114.5	80.0	59.5	48.6	40.7	39.2	37.6	37.6	37.6
40°	1721.2	719.5	106.6	72.1	53.3	42.4	36.0	34.5	32.9	32.9	32.9
42.5°	1837.2	683.4	98.7	64.2	47.1	36.0	31.3	31.3	29.8	29.8	28.2
45°	1967.3	647.4	90.9	56.5	40.7	31.3	26.7	25.1	25.1	23.5	23.5
47.5°	2120.9	614.5	83.1	50.1	36.0	26.7	23.5	22.0	20.4	18.8	18.8
50°	2337.2	611.3	73.7	43.9	32.9	22.0	18.8	17.3	15.7	14.1	14.1
52.5°	2552.1	583.2	62.7	36.0	26.7	18.8	14.1	12.6	10.9	10.9	9.4
55°	2600.6	536.1	54.8	31.3	20.4	14.1	10.9	7.9	7.9	6.2	6.2
57.5°	2707.2	514.1	47.1	25.1	15.7	10.9	6.2	4.7	4.7	4.7	4.7
60°	2917.3	507.9	40.7	22.0	10.9	7.9	4.7	3.2	3.2	1.5	1.5
62.5°	3207.3	501.7	34.5	18.8	7.9	4.7	3.2	1.5	0.0	0.0	0.0
65°	3367.1	459.3	28.2	14.1	6.2	4.7	1.5	0.0	0.0	0.0	0.0
67.5°	3324.8	379.3	25.1	9.4	4.7	3.2	1.5	0.0	0.0	0.0	0.0
69°	3147.7	319.8	20.4	7.9	4.7	3.2	1.5	0.0	0.0	0.0	0.0
70°	2934.5	275.9	18.8	6.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0
72.5°	2083.3	144.2	12.6	4.7	3.2	1.5	0.0	0.0	0.0	0.0	0.0
75°	973.4	64.2	7.9	3.2	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	214.7	29.8	4.7	3.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	40.7	10.9	3.2	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.1	4.7	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.7	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)