

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: P214650

Luminaire Tested: **ARCH-AF24-90-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214650
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-AF24-90-D-U-T2R-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 6734 lumens
Efficiency: N/A
Efficacy: 71.6 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

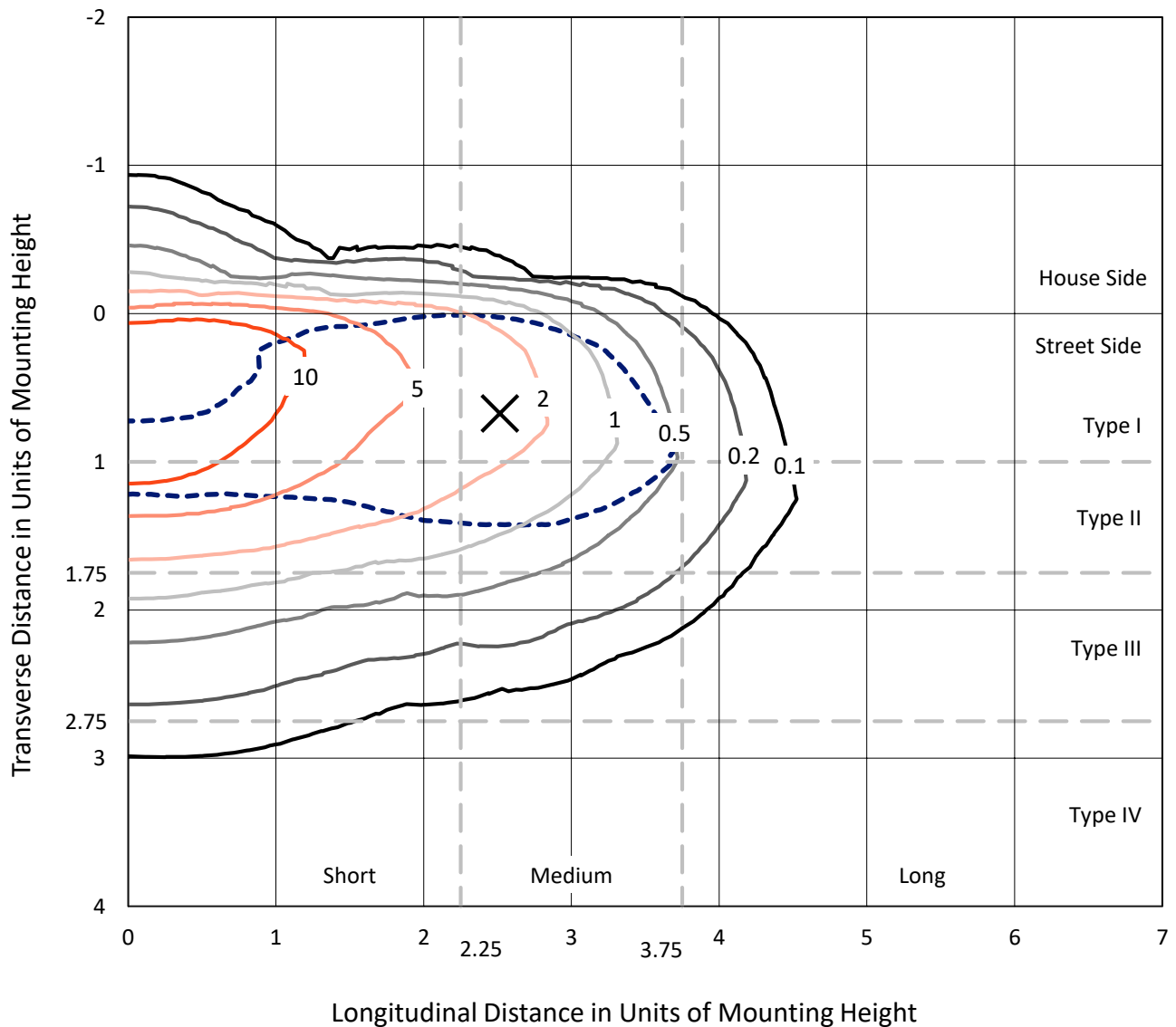


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

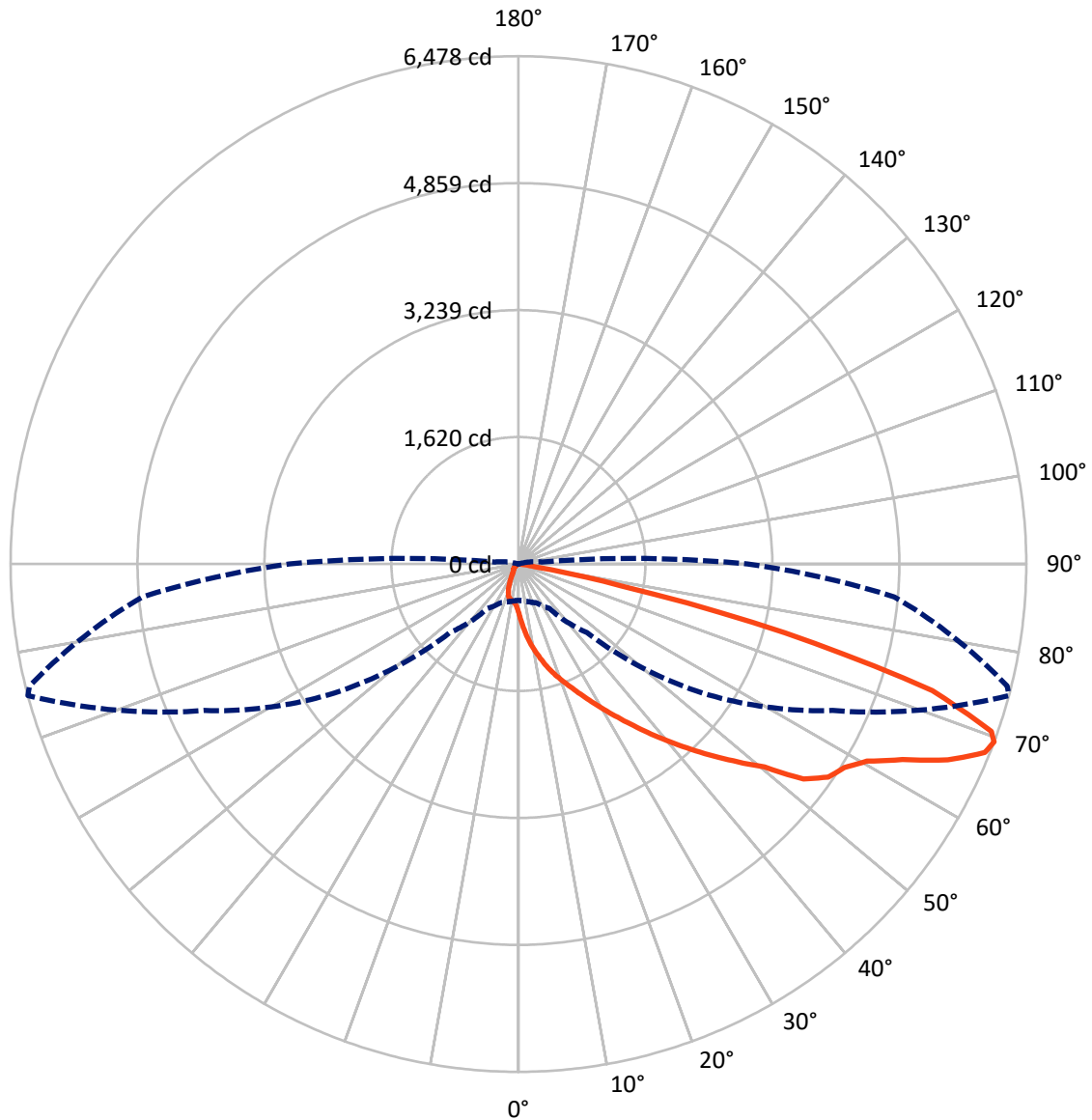


Based on 10 foot mounting height. Maximum calculated value = 17.2 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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

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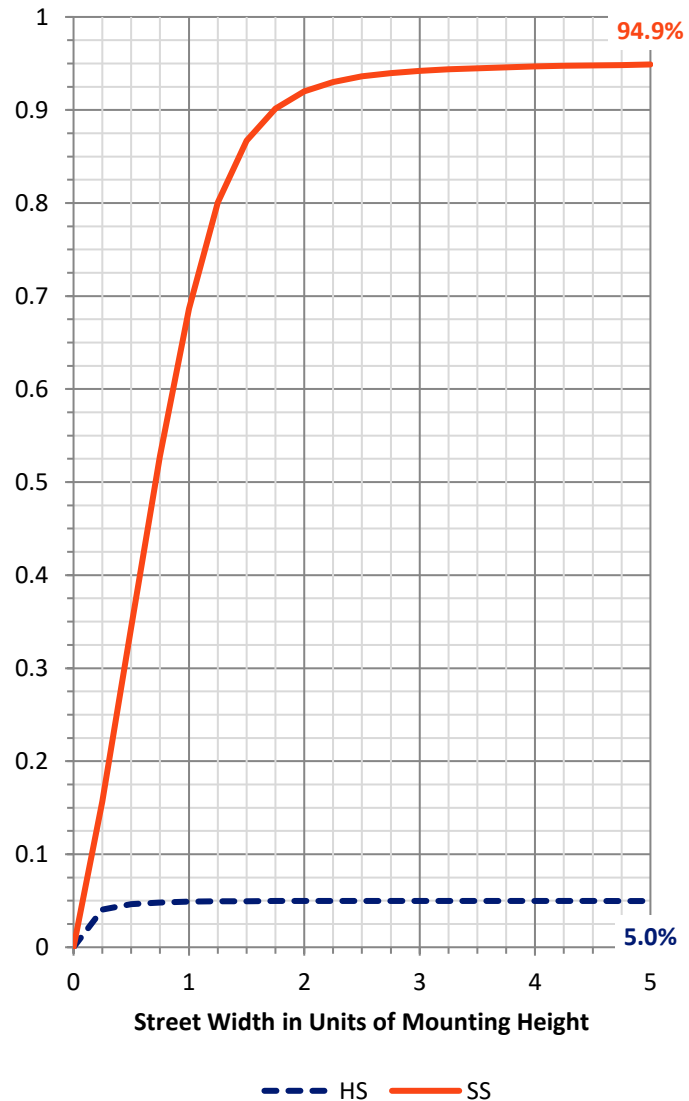
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	336.0	0.0	336.0
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6398.0	0.0	6398.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	6734.0	0.0	6734.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.1
10°-20°	261.2	3.9
20°-30°	498.7	7.4
30°-40°	894.5	13.3
40°-50°	1370.5	20.4
50°-60°	1592.8	23.7
60°-70°	1410.5	20.9
70°-80°	608.4	9.0
80°-90°	24.4	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°	6734.0	100.0
0°-180°	6734.0	100.0

Coefficient of Utilization



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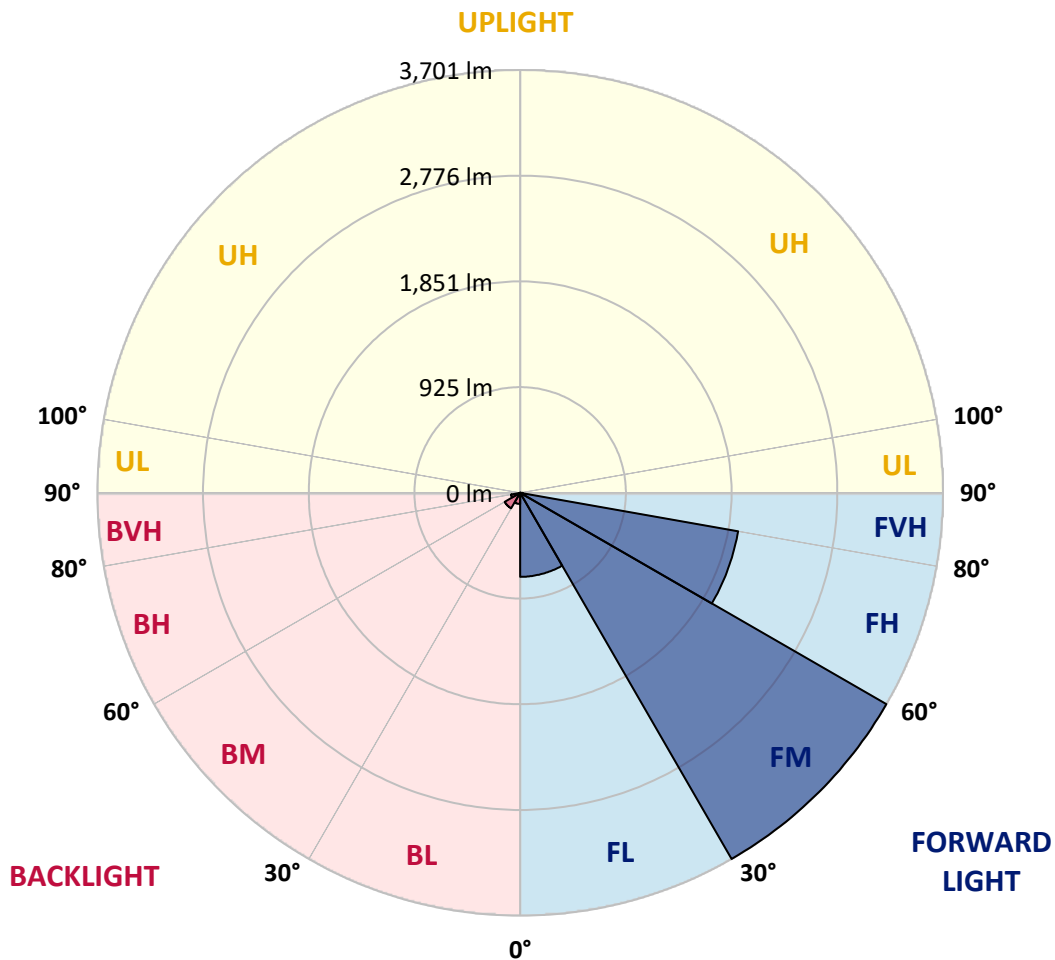
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	735.4	10.9			
FM (30°-60°)	3701.2	55.0			
FH (60°-80°)	1937.5	28.8			G2/5000
FVH (80°-90°)	24.0	0.4			G1/100
BL (0°-30°)	97.6	1.4	B0/110		
BM (30°-60°)	156.6	2.3	B0/220		
BH (60°-80°)	81.4	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°	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6
2.5°	1032.2	1022.0	1011.9	1000.2	974.1	929.0	872.3	811.2	735.6	722.5	661.5
5°	1253.2	1248.8	1238.7	1222.7	1193.6	1144.2	1080.2	990.1	863.6	841.8	712.4
7.5°	1408.8	1405.8	1397.1	1378.2	1352.1	1302.6	1235.7	1138.3	991.5	966.8	776.3
10°	1548.3	1546.9	1539.6	1522.1	1496.0	1442.2	1371.0	1269.2	1113.6	1086.0	850.5
12.5°	1674.8	1676.3	1673.3	1664.6	1645.7	1594.8	1513.4	1402.9	1231.4	1200.9	939.2
15°	1748.9	1753.3	1764.9	1782.4	1788.2	1747.5	1663.2	1541.0	1352.1	1325.9	1040.9
17.5°	1724.2	1728.6	1764.9	1824.5	1881.2	1887.1	1811.5	1671.9	1471.3	1445.1	1141.2
20°	1664.6	1670.4	1708.2	1789.7	1900.1	1977.2	1946.7	1814.4	1584.7	1552.7	1237.2
22.5°	1731.5	1731.5	1743.1	1792.6	1892.9	2013.5	2054.2	1956.8	1701.0	1661.7	1333.2
25°	1961.2	1956.8	1932.1	1911.8	1943.8	2051.3	2135.7	2102.2	1837.6	1792.6	1434.9
27.5°	2252.0	2272.3	2225.8	2151.7	2079.0	2125.5	2208.4	2246.2	1988.8	1942.3	1539.6
30°	2577.6	2586.3	2531.1	2432.2	2304.3	2259.2	2294.1	2369.7	2153.1	2102.2	1648.6
32.5°	2871.3	2864.0	2817.5	2714.3	2555.8	2458.4	2404.6	2468.6	2331.9	2273.8	1760.6
35°	3131.5	3137.3	3080.6	2961.4	2805.9	2702.7	2574.7	2580.5	2532.6	2465.7	1890.0
37.5°	3365.6	3355.4	3301.6	3182.4	3041.4	2929.4	2794.2	2696.8	2752.1	2682.3	2035.3
40°	3556.0	3545.9	3489.2	3372.9	3240.6	3149.0	3042.8	2852.4	2983.2	2903.3	2190.9
42.5°	3707.2	3695.6	3647.6	3535.7	3407.8	3326.3	3275.5	3044.3	3230.4	3150.4	2365.4
45°	3781.4	3771.2	3742.1	3657.8	3545.9	3474.6	3499.3	3265.3	3495.0	3428.1	2557.3
47.5°	3694.2	3689.8	3723.2	3708.7	3644.7	3606.9	3692.7	3506.6	3772.7	3707.2	2778.2
50°	3429.6	3436.8	3534.2	3654.9	3685.4	3730.5	3851.2	3761.0	4070.7	4000.9	3032.7
52.5°	2776.8	2826.2	3119.9	3410.7	3636.0	3806.1	4037.3	4124.5	4556.3	4487.9	3429.6
55°	2073.1	2093.5	2413.3	2910.5	3436.8	3800.3	4175.4	4338.2	4796.2	4726.4	3534.2
57.5°	1644.3	1651.5	1810.0	2317.4	3026.9	3669.4	4248.1	4415.2	4900.8	4842.7	3689.8
60°	1291.0	1299.7	1414.6	1763.5	2449.7	3316.2	4143.4	4482.1	5105.8	5059.3	3961.7
62.5°	1004.6	1013.3	1083.1	1288.1	1837.6	2772.4	3932.6	4589.7	5495.4	5473.6	4406.5
65°	777.8	780.7	828.7	924.6	1298.3	2183.6	3675.3	4690.0	6021.7	6002.8	4767.1
67.5°	574.3	578.6	612.1	671.7	876.7	1568.7	3253.6	4613.0	6418.6	6363.4	4897.9
69°	463.8	468.1	497.2	545.2	692.0	1235.7	2868.4	4422.5	6478.2	6425.9	4815.1
70°	396.9	399.8	428.9	469.6	590.3	1049.7	2563.1	4258.2	6399.7	6348.8	4626.1
72.5°	254.4	269.0	298.0	324.2	391.1	694.9	1730.0	3531.3	5521.6	5434.4	3622.9
75°	141.0	145.4	197.7	229.7	260.2	452.1	962.4	2202.5	3512.4	3451.4	1937.9
77.5°	116.3	119.2	139.6	174.5	174.5	253.0	363.5	867.9	1336.1	1205.2	524.8
80°	81.4	84.3	106.1	114.9	125.0	142.5	117.8	190.5	206.4	183.2	78.5
82.5°	56.7	59.6	72.7	94.5	100.3	66.9	43.6	56.7	59.6	59.6	30.5
85°	10.2	14.5	53.8	78.5	59.6	20.4	24.7	20.4	18.9	20.4	7.3
87.5°	0.0	0.0	33.4	37.8	32.0	8.7	10.2	7.3	4.4	5.8	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°	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6	626.6
2.5°	631.0	600.4	548.1	510.3	478.3	453.6	443.4	427.4	415.8	421.6	414.3
5°	648.4	594.6	510.3	456.5	418.7	386.7	360.5	340.2	324.2	321.3	318.4
7.5°	676.0	599.0	488.5	421.6	364.9	315.5	274.8	244.2	221.0	221.0	212.3
10°	713.8	610.6	475.4	386.7	302.4	235.5	194.8	165.7	154.1	152.7	149.7
12.5°	766.2	632.4	465.2	341.6	235.5	171.6	146.8	136.7	132.3	130.8	129.4
15°	837.4	664.4	453.6	286.4	178.8	141.0	130.8	122.1	117.8	116.3	114.9
17.5°	905.7	693.5	428.9	229.7	145.4	127.9	116.3	109.0	103.2	101.8	101.8
20°	969.7	718.2	386.7	178.8	130.8	114.9	103.2	94.5	88.7	87.2	87.2
22.5°	1036.6	738.5	334.4	145.4	119.2	101.8	90.1	81.4	75.6	74.1	72.7
25°	1107.8	753.1	274.8	129.4	107.6	90.1	77.1	69.8	65.4	64.0	62.5
27.5°	1184.9	758.9	218.1	117.8	94.5	78.5	66.9	59.6	56.7	55.2	55.2
30°	1254.6	753.1	168.6	104.7	82.9	68.3	58.2	52.3	49.4	48.0	48.0
32.5°	1327.3	738.5	135.2	93.0	72.7	58.2	49.4	45.1	43.6	42.2	42.2
35°	1404.4	719.6	116.3	82.9	62.5	50.9	43.6	40.7	39.3	37.8	37.8
37.5°	1494.5	696.4	106.1	74.1	55.2	45.1	37.8	36.3	34.9	34.9	34.9
40°	1596.3	667.3	98.9	66.9	49.4	39.3	33.4	32.0	30.5	30.5	30.5
42.5°	1703.9	633.9	91.6	59.6	43.6	33.4	29.1	29.1	27.6	27.6	26.2
45°	1824.5	600.4	84.3	52.3	37.8	29.1	24.7	23.3	23.3	21.8	21.8
47.5°	1967.0	569.9	77.1	46.5	33.4	24.7	21.8	20.4	18.9	17.4	17.4
50°	2167.6	567.0	68.3	40.7	30.5	20.4	17.4	16.0	14.5	13.1	13.1
52.5°	2366.8	540.8	58.2	33.4	24.7	17.4	13.1	11.6	10.2	10.2	8.7
55°	2411.9	497.2	50.9	29.1	18.9	13.1	10.2	7.3	7.3	5.8	5.8
57.5°	2510.7	476.9	43.6	23.3	14.5	10.2	5.8	4.4	4.4	4.4	4.4
60°	2705.6	471.0	37.8	20.4	10.2	7.3	4.4	2.9	2.9	1.5	1.5
62.5°	2974.5	465.2	32.0	17.4	7.3	4.4	2.9	1.5	0.0	0.0	0.0
65°	3122.8	426.0	26.2	13.1	5.8	4.4	1.5	0.0	0.0	0.0	0.0
67.5°	3083.6	351.8	23.3	8.7	4.4	2.9	1.5	0.0	0.0	0.0	0.0
69°	2919.3	296.6	18.9	7.3	4.4	2.9	1.5	0.0	0.0	0.0	0.0
70°	2721.6	255.9	17.4	5.8	2.9	1.5	1.5	0.0	0.0	0.0	0.0
72.5°	1932.1	133.8	11.6	4.4	2.9	1.5	0.0	0.0	0.0	0.0	0.0
75°	902.8	59.6	7.3	2.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	199.2	27.6	4.4	2.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	37.8	10.2	2.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.1	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)