

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: P397878

Luminaire Tested: **ARCH-S-PA1-50-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397878
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-PA1-50-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 670mA 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: 4845 lumens
Efficiency: N/A
Efficacy: 89.7 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 - G1

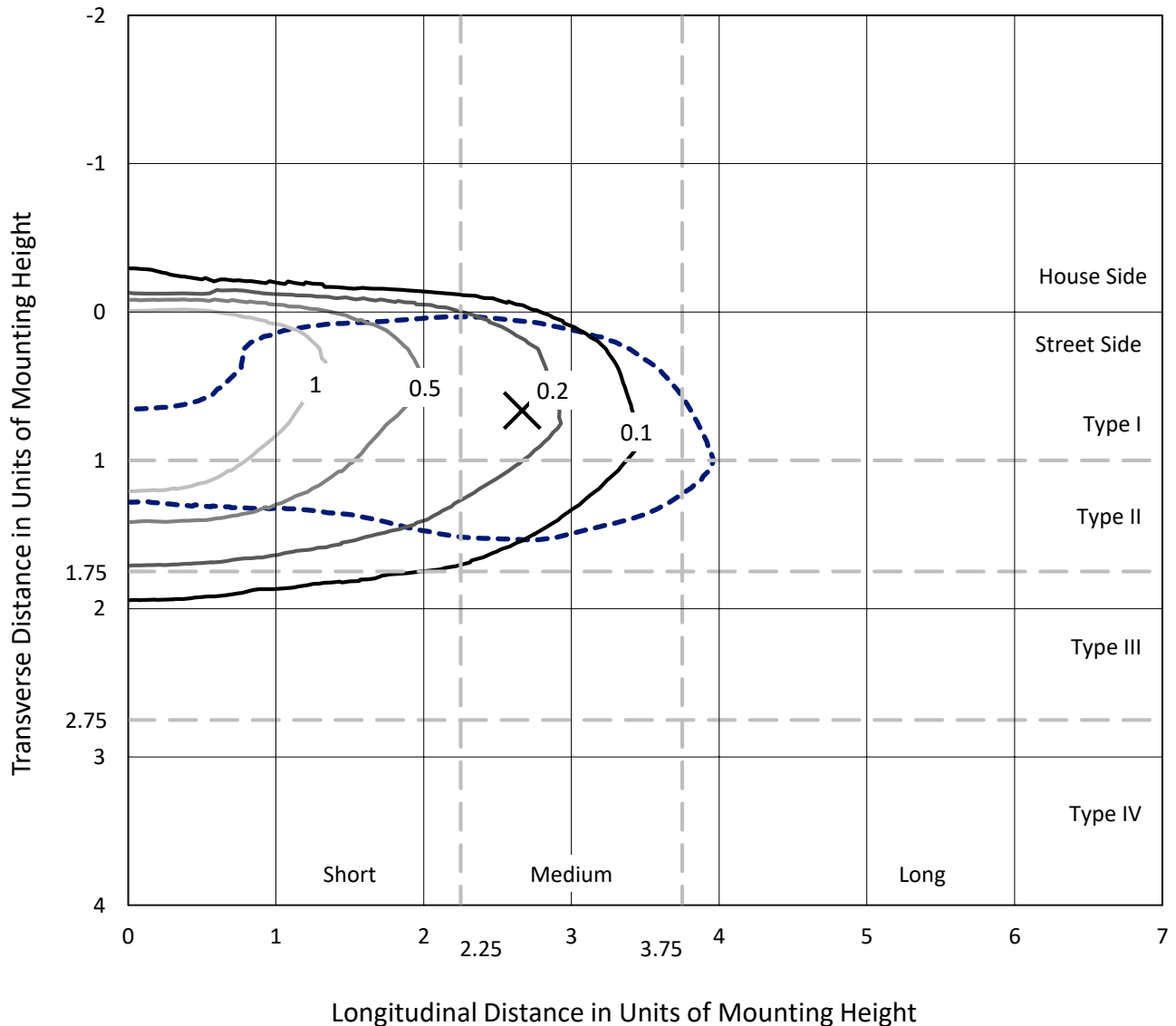
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

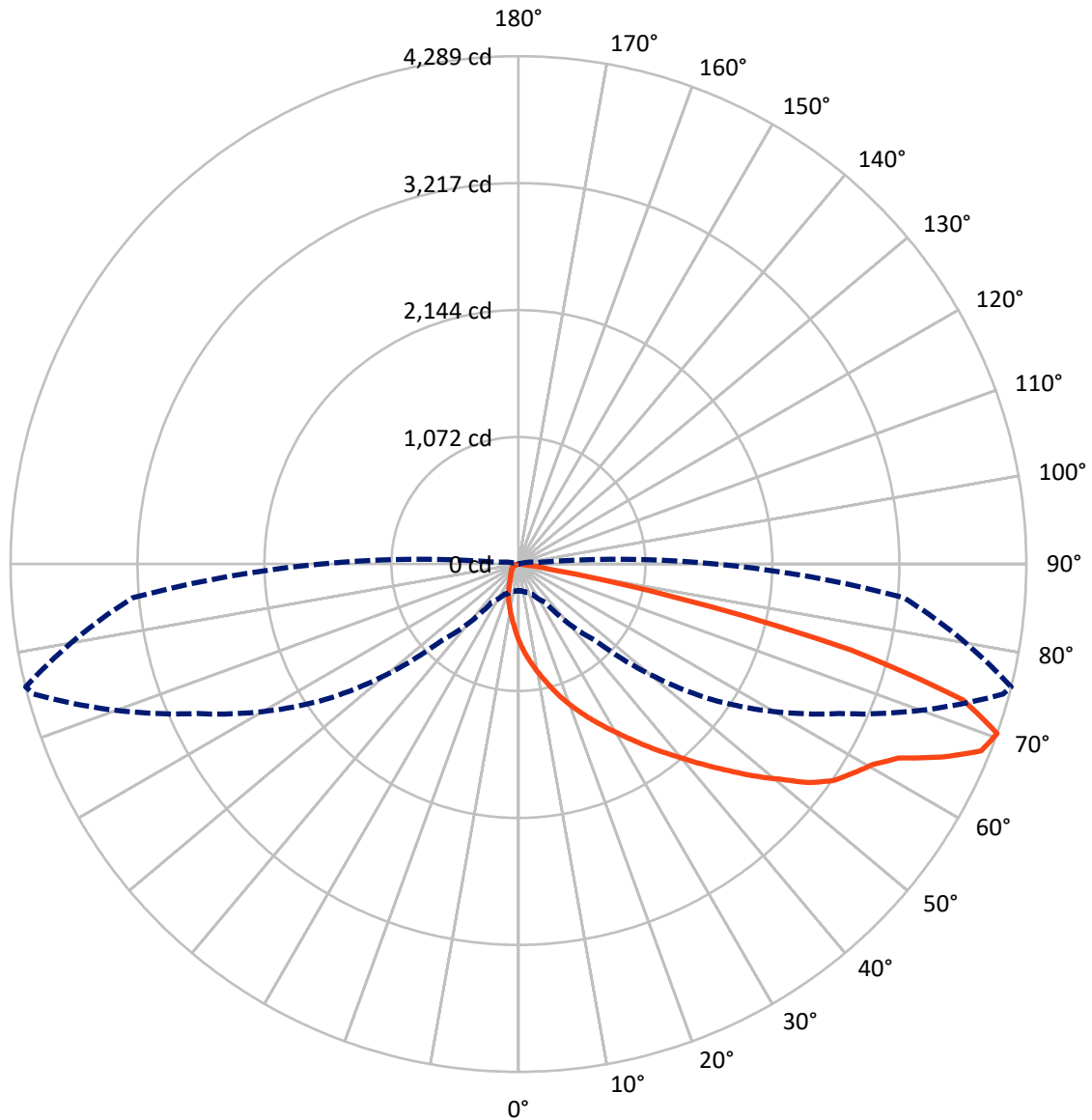
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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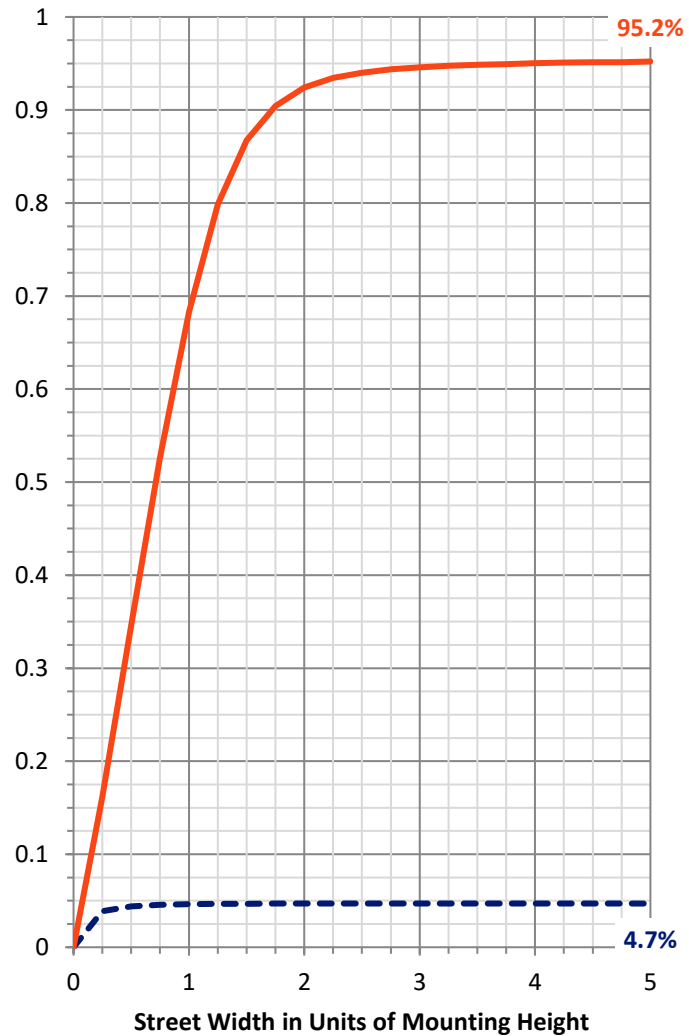
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	228.5	0.0	228.5
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	4616.5	0.0	4616.5
	% Fixture	95.3	0.0	95.3
Total	Lumens	4845.0	0.0	4845.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	1.3
10°-20°	197.2	4.1
20°-30°	367.2	7.6
30°-40°	649.6	13.4
40°-50°	993.3	20.5
50°-60°	1126.2	23.2
60°-70°	965.4	19.9
70°-80°	467.6	9.7
80°-90°	17.3	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°	4845.0	100.0
0°-180°	4845.0	100.0

Coefficient of Utilization



--- HS — SS

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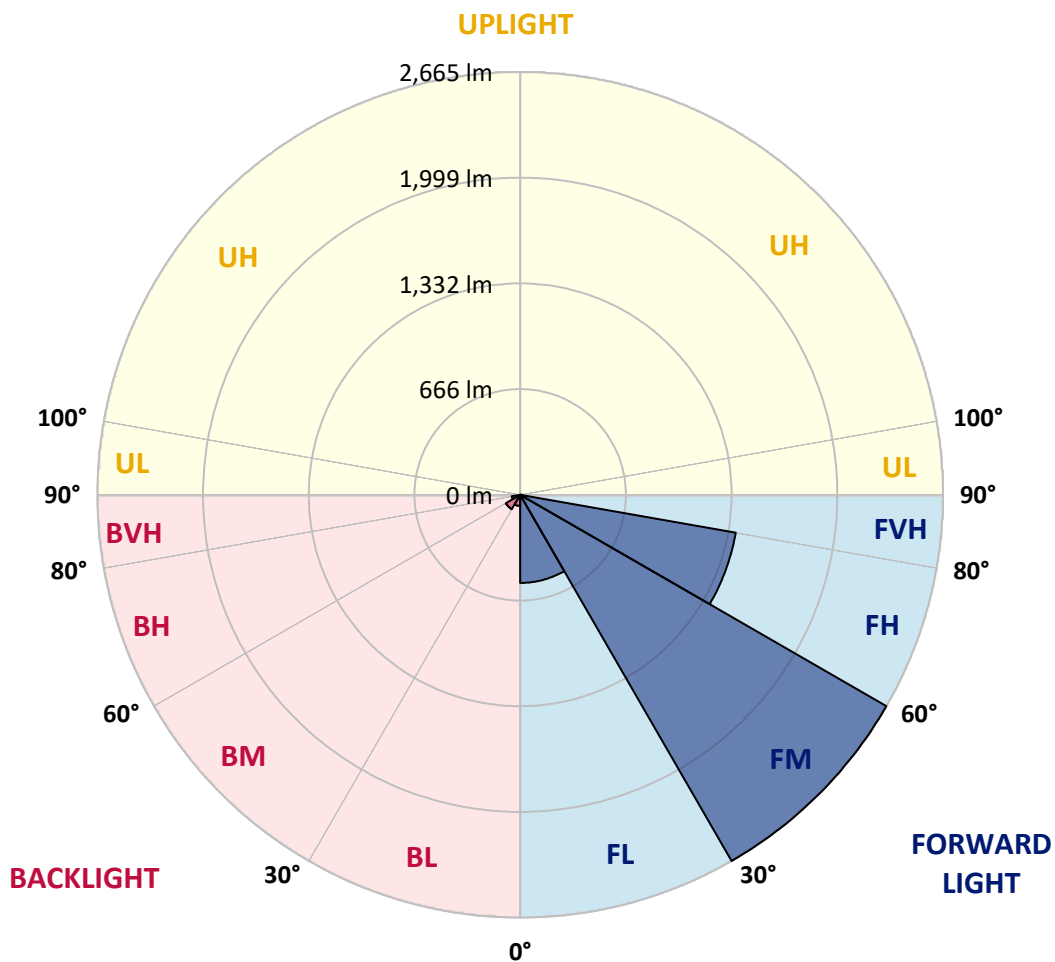
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	555.4	11.5			
FM (30°-60°)	2664.8	55.0			
FH (60°-80°)	1379.2	28.5			G1/1800
FVH (80°-90°)	17.0	0.4			G1/100
BL (0°-30°)	70.1	1.4	B0/110		
BM (30°-60°)	104.3	2.2	B0/220		
BH (60°-80°)	53.8	1.1	B0/110		G0/110
BVH (80°-90°)	0.3	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-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5
2.5°	886.5	881.7	876.8	858.3	841.3	826.0	797.0	759.0	725.2	717.9	678.4
5°	1041.4	1035.7	1028.5	1009.9	988.1	962.3	919.6	861.5	801.8	788.9	715.5
7.5°	1146.2	1141.4	1130.9	1122.0	1100.2	1075.2	1027.7	959.9	877.6	861.5	758.2
10°	1218.0	1214.8	1213.2	1205.9	1189.8	1169.6	1122.0	1051.0	954.2	935.7	803.4
12.5°	1243.8	1243.8	1251.9	1264.0	1266.4	1260.0	1216.4	1145.4	1034.9	1015.6	856.6
15°	1209.1	1213.2	1230.9	1269.6	1310.0	1336.6	1309.2	1243.0	1123.6	1102.7	919.6
17.5°	1199.5	1203.5	1215.6	1249.5	1303.5	1374.5	1388.2	1337.4	1207.5	1189.8	984.1
20°	1226.9	1230.9	1241.4	1270.4	1311.6	1383.4	1440.6	1428.6	1296.3	1277.7	1049.4
22.5°	1292.2	1294.6	1294.6	1317.2	1353.5	1406.8	1473.7	1514.9	1387.4	1367.2	1114.0
25°	1432.6	1427.7	1408.4	1397.1	1420.5	1464.0	1515.7	1590.7	1489.0	1461.6	1183.3
27.5°	1616.5	1632.6	1585.8	1531.8	1514.1	1539.1	1574.6	1657.6	1587.5	1558.4	1246.3
30°	1865.7	1859.3	1798.0	1720.6	1643.9	1635.0	1647.1	1714.9	1685.9	1658.4	1316.4
32.5°	2070.6	2082.7	2018.2	1923.8	1809.3	1755.2	1742.3	1783.5	1790.7	1773.0	1399.5
35°	2281.2	2294.1	2231.2	2126.3	1990.0	1899.6	1862.5	1868.2	1920.6	1898.0	1486.6
37.5°	2469.9	2481.2	2419.1	2311.8	2175.5	2065.0	2011.7	1968.2	2046.4	2026.3	1578.6
40°	2613.5	2615.1	2573.2	2477.2	2348.1	2233.6	2173.1	2087.6	2179.5	2165.8	1674.6
42.5°	2715.1	2718.4	2687.7	2605.4	2486.0	2379.6	2330.4	2228.7	2332.8	2320.7	1785.9
45°	2762.7	2768.4	2765.1	2689.3	2590.1	2498.1	2482.0	2378.8	2500.6	2489.3	1914.1
47.5°	2717.6	2717.6	2758.7	2748.2	2657.1	2595.8	2614.3	2535.3	2682.9	2672.4	2044.8
50°	2529.6	2532.0	2615.9	2736.1	2682.9	2669.2	2727.2	2688.5	2848.2	2854.7	2201.3
52.5°	2035.9	2031.9	2315.0	2545.7	2665.1	2702.2	2831.3	2845.0	3046.7	3066.0	2357.0
55°	1521.3	1518.9	1789.9	2208.6	2540.9	2685.3	2889.4	2984.5	3216.1	3228.2	2473.1
57.5°	1204.3	1197.9	1347.1	1780.2	2260.2	2609.5	2891.8	3011.2	3310.4	3331.4	2586.1
60°	926.0	920.4	1031.7	1324.5	1862.5	2407.8	2822.4	3012.8	3401.6	3438.7	2737.7
62.5°	662.2	668.7	754.2	950.2	1432.6	2123.1	2732.1	3035.4	3563.7	3605.7	2953.1
65°	446.9	443.6	514.6	646.9	1018.8	1739.9	2593.3	3083.0	3855.7	3929.1	3211.2
67.5°	310.6	313.0	345.2	421.1	646.9	1335.8	2362.6	3109.6	4157.4	4214.7	3391.9
70°	224.2	227.5	245.2	283.1	395.3	905.9	1997.2	2987.8	4238.9	4288.9	3266.1
72.5°	147.6	154.1	180.7	200.9	252.5	567.1	1471.3	2574.0	3888.0	3925.1	2740.1
75°	79.9	81.5	116.2	150.0	179.9	353.3	877.6	1735.9	2908.7	2896.6	1806.9
77.5°	62.1	64.5	71.8	107.3	121.0	194.4	346.9	784.0	1377.7	1340.6	616.3
80°	37.9	39.5	50.0	63.7	84.7	112.9	101.6	213.0	279.9	262.2	90.3
82.5°	22.6	24.2	29.8	53.2	67.0	53.2	35.5	51.6	52.4	51.6	22.6
85°	4.0	4.0	21.0	37.1	35.5	15.3	21.0	16.9	15.3	16.1	4.8
87.5°	0.0	0.0	8.1	11.3	16.1	5.6	8.1	4.0	4.0	4.0	2.4
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°	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5	648.5
2.5°	654.2	626.8	570.3	521.1	471.9	435.6	408.2	379.9	370.2	358.1	351.7
5°	665.5	611.4	499.3	409.8	333.9	275.9	238.8	216.2	201.7	191.2	188.8
7.5°	682.4	599.3	442.0	321.0	238.0	179.9	149.2	133.9	125.8	121.0	119.4
10°	702.6	588.8	385.6	250.1	167.8	126.6	109.7	103.2	100.0	98.4	97.6
12.5°	730.8	584.8	338.0	192.8	126.6	104.1	95.2	91.1	88.7	86.3	85.5
15°	767.9	586.4	294.4	149.2	104.9	92.8	85.5	81.5	78.2	75.8	75.8
17.5°	806.6	588.8	251.7	121.0	95.2	84.7	76.6	71.0	68.6	66.1	65.3
20°	842.9	588.0	210.5	103.2	86.3	75.8	67.8	62.1	58.1	55.7	55.7
22.5°	877.6	583.2	171.8	92.8	79.1	67.0	58.1	52.4	49.2	46.8	46.8
25°	914.7	573.5	140.4	84.7	70.2	58.9	50.0	44.4	41.9	39.5	39.5
27.5°	943.8	557.4	114.5	77.4	62.1	50.8	42.8	37.9	35.5	33.9	33.9
30°	975.2	534.0	95.2	69.4	54.0	43.6	36.3	32.3	29.8	29.0	29.0
32.5°	1009.9	508.2	81.5	61.3	46.0	37.1	30.7	28.2	25.8	25.0	25.0
35°	1050.2	485.6	73.4	53.2	40.3	31.5	26.6	24.2	22.6	22.6	22.6
37.5°	1096.2	462.2	66.1	46.8	34.7	26.6	22.6	21.8	21.0	20.2	20.2
40°	1146.2	437.2	59.7	41.1	29.8	22.6	19.4	19.4	18.6	18.6	18.6
42.5°	1202.7	415.4	54.0	36.3	25.8	19.4	16.9	16.9	16.1	16.1	16.1
45°	1264.0	395.3	49.2	32.3	22.6	16.9	15.3	14.5	13.7	13.7	13.7
47.5°	1336.6	384.0	45.2	28.2	19.4	14.5	12.9	12.1	11.3	10.5	10.5
50°	1429.4	388.8	41.1	23.4	16.9	12.1	10.5	9.7	8.9	8.1	8.1
52.5°	1502.8	386.4	35.5	20.2	13.7	9.7	8.1	7.3	6.5	5.6	5.6
55°	1556.0	376.7	30.7	16.9	10.5	8.1	6.5	4.8	4.0	4.0	4.0
57.5°	1608.4	367.0	25.8	13.7	8.1	5.6	4.0	3.2	3.2	3.2	3.2
60°	1689.9	353.3	22.6	11.3	6.5	4.0	2.4	2.4	1.6	1.6	1.6
62.5°	1789.1	336.4	18.6	9.7	4.8	3.2	1.6	1.6	0.0	0.0	0.0
65°	1898.0	306.5	15.3	7.3	4.0	2.4	1.6	0.0	0.0	0.0	0.0
67.5°	1873.0	246.0	12.9	4.8	3.2	1.6	0.8	0.0	0.0	0.0	0.0
70°	1656.8	166.2	10.5	4.0	2.4	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	1297.9	98.4	7.3	3.2	1.6	0.8	0.0	0.0	0.0	0.0	0.0
75°	830.8	49.2	4.8	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	278.3	24.2	3.2	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.5	8.1	1.6	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.9	3.2	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.2	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	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)