

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: P397824

Luminaire Tested: **ARCH-S-PA1-50-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397824
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-PA1-50-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 5099 lumens
Efficiency: N/A
Efficacy: 94.4 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 (A_{in}): 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

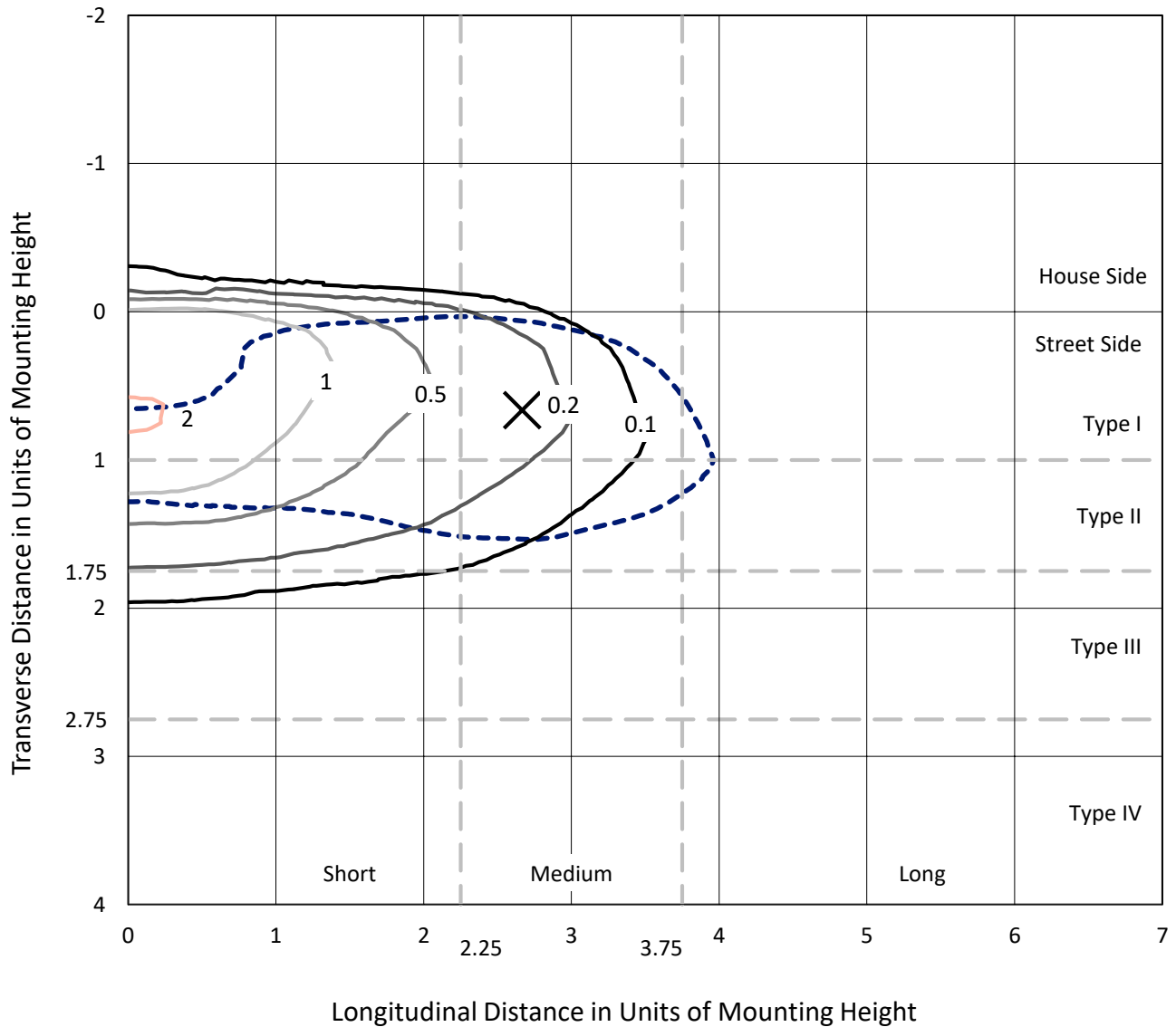


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Iso-Footcandle Lines of Horizontal Illumination

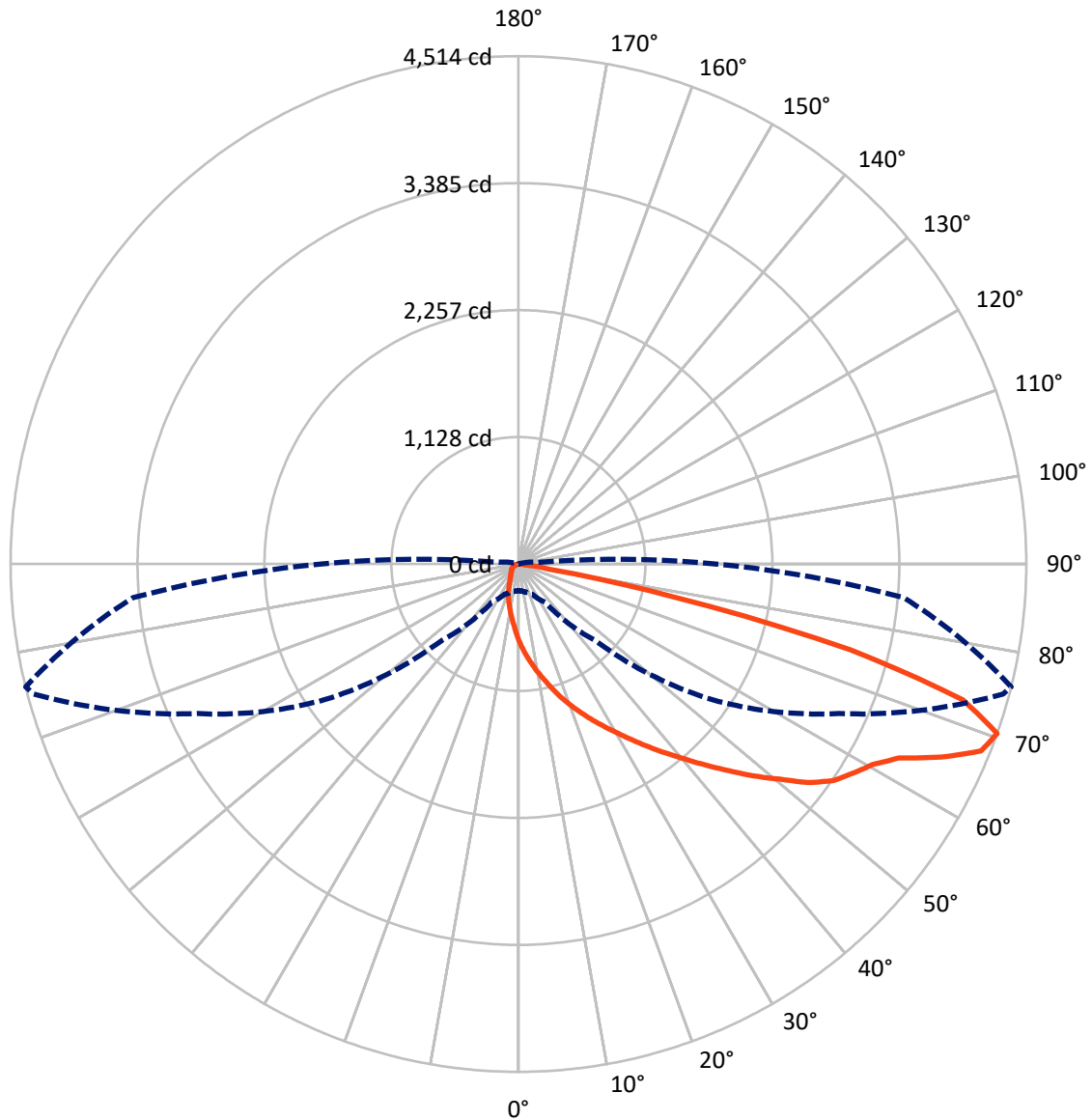
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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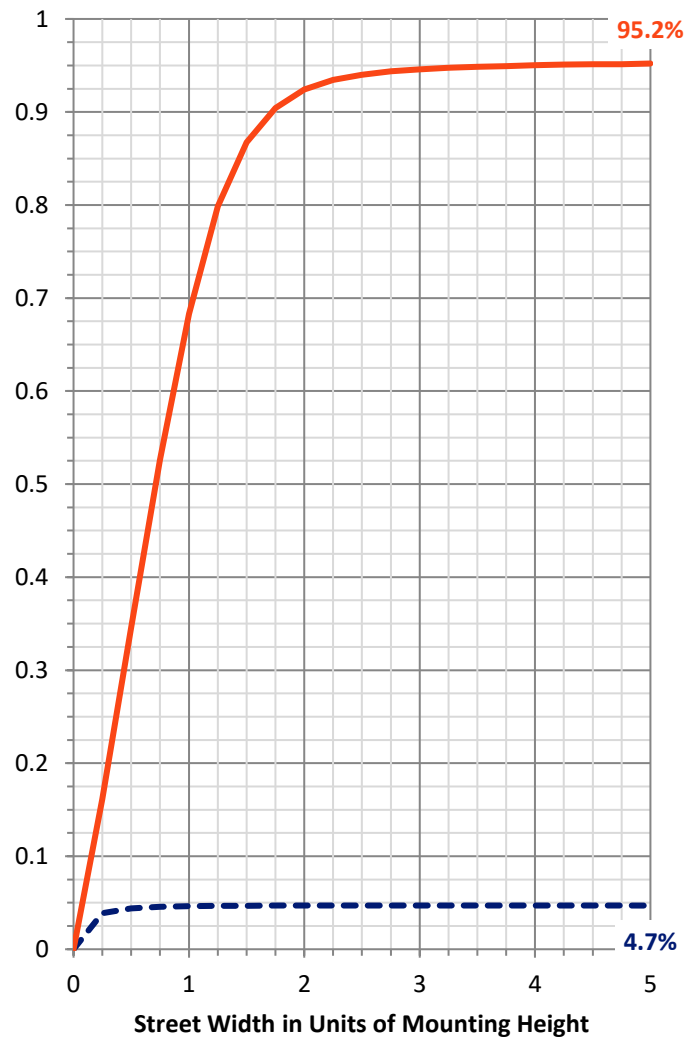
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	240.5	0.0	240.5
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	4858.5	0.0	4858.5
	% Fixture	95.3	0.0	95.3
Total	Lumens	5099.0	0.0	5099.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	1.3
10°-20°	207.5	4.1
20°-30°	386.5	7.6
30°-40°	683.6	13.4
40°-50°	1045.4	20.5
50°-60°	1185.2	23.2
60°-70°	1016.0	19.9
70°-80°	492.1	9.7
80°-90°	18.3	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°	5099.0	100.0
0°-180°	5099.0	100.0

Coefficient of Utilization



--- HS — SS

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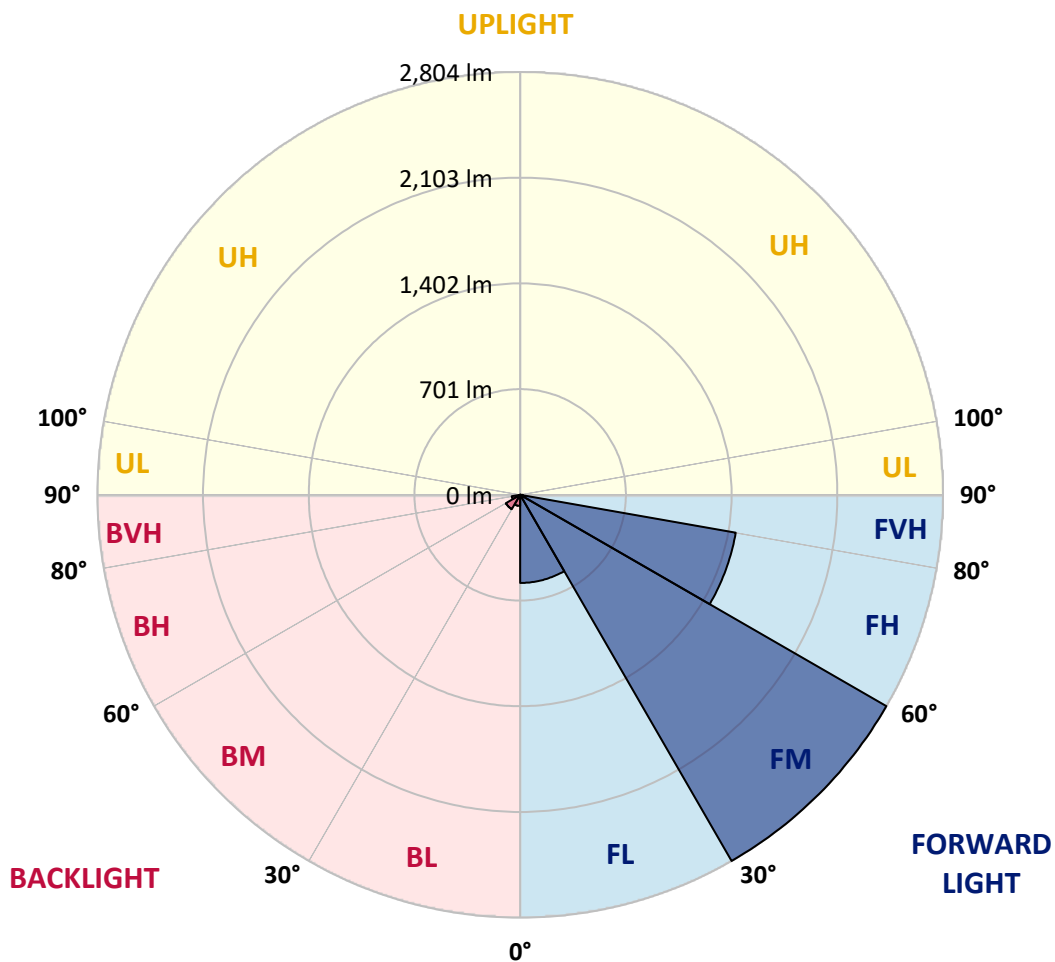
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	584.5	11.5			
FM	(30°-60°)	2804.5	55.0			
FH	(60°-80°)	1451.5	28.5			G1/1800
FVH	(80°-90°)	17.9	0.4			G1/100
BL	(0°-30°)	73.8	1.4	B0/110		
BM	(30°-60°)	109.8	2.2	B0/220		
BH	(60°-80°)	56.6	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°	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5
2.5°	933.0	927.9	922.8	903.3	885.4	869.3	838.7	798.8	763.2	755.5	713.9
5°	1096.0	1090.0	1082.4	1062.9	1039.9	1012.8	967.8	906.6	843.8	830.2	753.0
7.5°	1206.3	1201.2	1190.2	1180.9	1157.9	1131.6	1081.5	1010.2	923.6	906.6	798.0
10°	1281.9	1278.5	1276.8	1269.1	1252.2	1230.9	1180.9	1106.1	1004.3	984.8	845.5
12.5°	1309.0	1309.0	1317.5	1330.3	1332.8	1326.0	1280.2	1205.5	1089.2	1068.8	901.6
15°	1272.5	1276.8	1295.5	1336.2	1378.7	1406.7	1377.8	1308.2	1182.5	1160.5	967.8
17.5°	1262.3	1266.6	1279.3	1315.0	1371.9	1446.6	1461.0	1407.5	1270.8	1252.2	1035.7
20°	1291.2	1295.5	1306.5	1337.1	1380.3	1455.9	1516.2	1503.4	1364.2	1344.7	1104.4
22.5°	1360.0	1362.5	1362.5	1386.3	1424.5	1480.5	1551.0	1594.3	1460.1	1438.9	1172.4
25°	1507.7	1502.6	1482.2	1470.3	1495.0	1540.8	1595.1	1674.1	1567.1	1538.2	1245.4
27.5°	1701.2	1718.2	1669.0	1612.1	1593.4	1619.7	1657.1	1744.5	1670.7	1640.1	1311.6
30°	1963.6	1956.8	1892.2	1810.8	1730.1	1720.8	1733.5	1804.8	1774.2	1745.4	1385.4
32.5°	2179.2	2191.9	2124.0	2024.7	1904.1	1847.3	1833.7	1877.0	1884.6	1865.9	1472.9
35°	2400.8	2414.3	2348.1	2237.8	2094.3	1999.2	1960.2	1966.1	2021.3	1997.5	1564.6
37.5°	2599.4	2611.3	2545.9	2433.0	2289.5	2173.2	2117.2	2071.4	2153.7	2132.5	1661.3
40°	2750.5	2752.2	2708.1	2607.0	2471.2	2350.7	2287.0	2197.0	2293.8	2279.4	1762.4
42.5°	2857.5	2860.9	2828.6	2742.0	2616.4	2504.3	2452.5	2345.6	2455.1	2442.4	1879.5
45°	2907.6	2913.5	2910.1	2830.3	2725.9	2629.1	2612.1	2503.5	2631.7	2619.8	2014.5
47.5°	2860.0	2860.0	2903.3	2892.3	2796.4	2731.8	2751.4	2668.2	2823.5	2812.5	2152.0
50°	2662.2	2664.8	2753.1	2879.5	2823.5	2809.1	2870.2	2829.5	2997.5	3004.3	2316.7
52.5°	2142.7	2138.4	2436.4	2679.2	2804.8	2843.9	2979.7	2994.2	3206.4	3226.8	2480.6
55°	1601.1	1598.5	1883.8	2324.4	2674.1	2826.1	3040.8	3141.0	3384.7	3397.4	2602.8
57.5°	1267.4	1260.7	1417.7	1873.6	2378.7	2746.3	3043.4	3169.0	3484.0	3506.1	2721.6
60°	974.6	968.6	1085.8	1393.9	1960.2	2534.0	2970.4	3170.7	3579.9	3619.0	2881.2
62.5°	697.0	703.8	793.7	1000.0	1507.7	2234.4	2875.3	3194.5	3750.5	3794.7	3107.9
65°	470.3	466.9	541.6	680.8	1072.2	1831.1	2729.3	3244.6	4057.9	4135.1	3379.6
67.5°	326.8	329.4	363.3	443.1	680.8	1405.8	2486.5	3272.6	4375.3	4435.6	3569.7
70°	236.0	239.4	258.1	298.0	416.0	953.3	2101.9	3144.4	4461.1	4513.7	3437.3
72.5°	155.4	162.1	190.2	211.4	265.7	596.8	1548.4	2708.9	4091.8	4130.9	2883.8
75°	84.0	85.7	122.2	157.9	189.3	371.8	923.6	1826.9	3061.2	3048.5	1901.6
77.5°	65.4	67.9	75.6	112.9	127.3	204.6	365.0	825.2	1450.0	1410.9	648.6
80°	39.9	41.6	52.6	67.1	89.1	118.8	107.0	224.1	294.6	275.9	95.1
82.5°	23.8	25.5	31.4	56.0	70.5	56.0	37.4	54.3	55.2	54.3	23.8
85°	4.2	4.2	22.1	39.1	37.4	16.1	22.1	17.8	16.1	17.0	5.1
87.5°	0.0	0.0	8.5	11.9	17.0	5.9	8.5	4.2	4.2	4.2	2.5
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°	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5	682.5
2.5°	688.5	659.6	600.2	548.4	496.6	458.4	429.6	399.8	389.7	376.9	370.1
5°	700.4	643.5	525.5	431.3	351.5	290.3	251.3	227.5	212.2	201.2	198.6
7.5°	718.2	630.7	465.2	337.9	250.4	189.3	157.1	140.9	132.4	127.3	125.6
10°	739.4	619.7	405.8	263.2	176.6	133.3	115.5	108.7	105.3	103.6	102.7
12.5°	769.1	615.5	355.7	202.9	133.3	109.5	100.2	95.9	93.4	90.8	90.0
15°	808.2	617.2	309.9	157.1	110.4	97.6	90.0	85.7	82.3	79.8	79.8
17.5°	848.9	619.7	264.9	127.3	100.2	89.1	80.6	74.7	72.2	69.6	68.8
20°	887.1	618.9	221.6	108.7	90.8	79.8	71.3	65.4	61.1	58.6	58.6
22.5°	923.6	613.8	180.8	97.6	83.2	70.5	61.1	55.2	51.8	49.2	49.2
25°	962.7	603.6	147.7	89.1	73.9	62.0	52.6	46.7	44.1	41.6	41.6
27.5°	993.2	586.6	120.5	81.5	65.4	53.5	45.0	39.9	37.4	35.7	35.7
30°	1026.3	562.0	100.2	73.0	56.9	45.8	38.2	34.0	31.4	30.6	30.6
32.5°	1062.9	534.8	85.7	64.5	48.4	39.1	32.3	29.7	27.2	26.3	26.3
35°	1105.3	511.1	77.3	56.0	42.4	33.1	28.0	25.5	23.8	23.8	23.8
37.5°	1153.7	486.4	69.6	49.2	36.5	28.0	23.8	22.9	22.1	21.2	21.2
40°	1206.3	460.1	62.8	43.3	31.4	23.8	20.4	20.4	19.5	19.5	19.5
42.5°	1265.7	437.2	56.9	38.2	27.2	20.4	17.8	17.8	17.0	17.0	17.0
45°	1330.3	416.0	51.8	34.0	23.8	17.8	16.1	15.3	14.4	14.4	14.4
47.5°	1406.7	404.1	47.5	29.7	20.4	15.3	13.6	12.7	11.9	11.0	11.0
50°	1504.3	409.2	43.3	24.6	17.8	12.7	11.0	10.2	9.3	8.5	8.5
52.5°	1581.5	406.6	37.4	21.2	14.4	10.2	8.5	7.6	6.8	5.9	5.9
55°	1637.6	396.4	32.3	17.8	11.0	8.5	6.8	5.1	4.2	4.2	4.2
57.5°	1692.8	386.3	27.2	14.4	8.5	5.9	4.2	3.4	3.4	3.4	3.4
60°	1778.5	371.8	23.8	11.9	6.8	4.2	2.5	2.5	1.7	1.7	1.7
62.5°	1882.9	354.0	19.5	10.2	5.1	3.4	1.7	1.7	0.0	0.0	0.0
65°	1997.5	322.6	16.1	7.6	4.2	2.5	1.7	0.0	0.0	0.0	0.0
67.5°	1971.2	258.9	13.6	5.1	3.4	1.7	0.8	0.0	0.0	0.0	0.0
70°	1743.7	174.9	11.0	4.2	2.5	1.7	0.8	0.0	0.0	0.0	0.0
72.5°	1365.9	103.6	7.6	3.4	1.7	0.8	0.0	0.0	0.0	0.0	0.0
75°	874.4	51.8	5.1	2.5	1.7	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	292.9	25.5	3.4	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	41.6	8.5	1.7	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.3	3.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	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)