

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: P397869

Luminaire Tested: **ARCH-S-PA1-50-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397869
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-PA1-50-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 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: 4482 lumens
Efficiency: N/A
Efficacy: 83.0 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

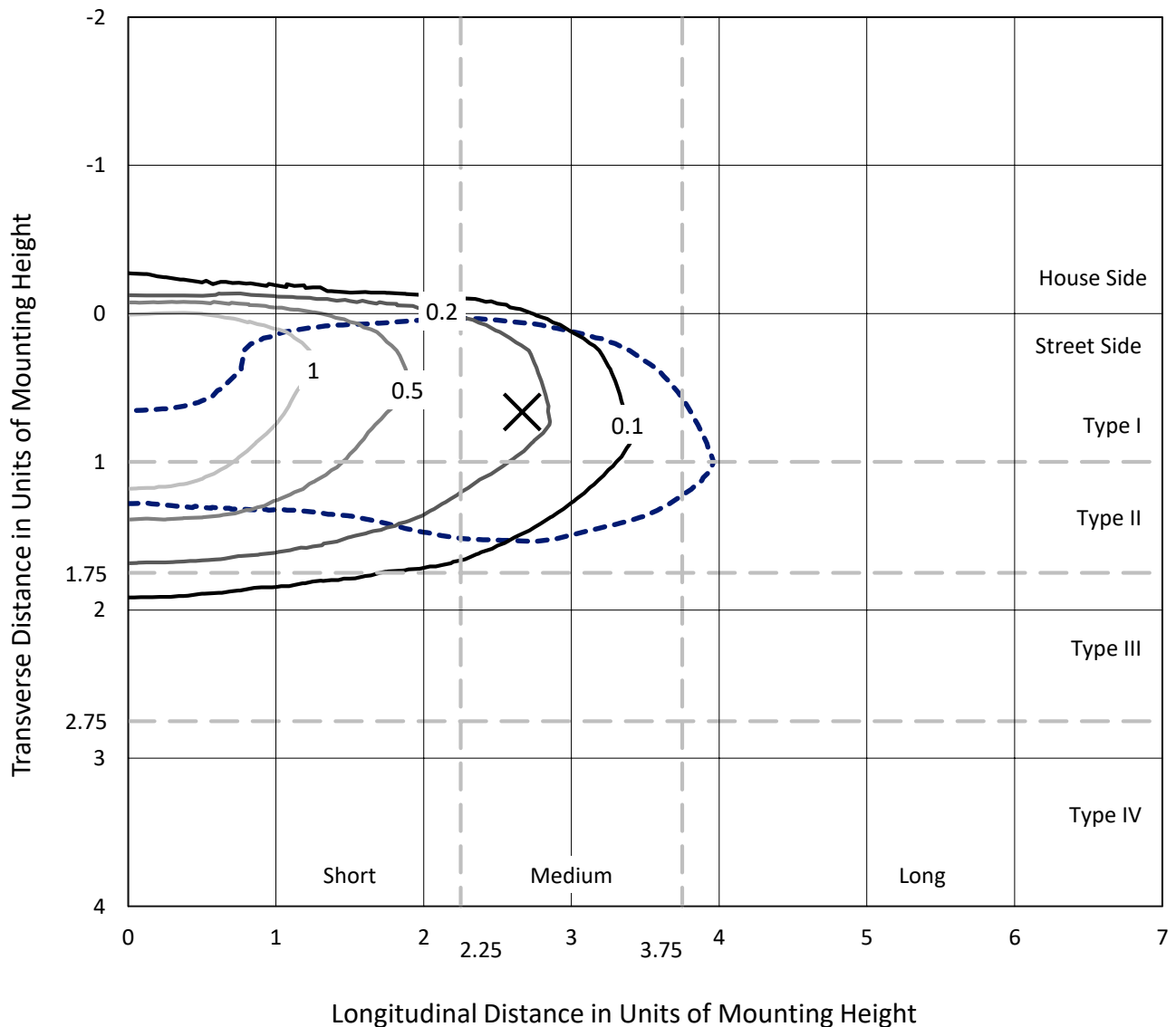
Input Watts (W): 54
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

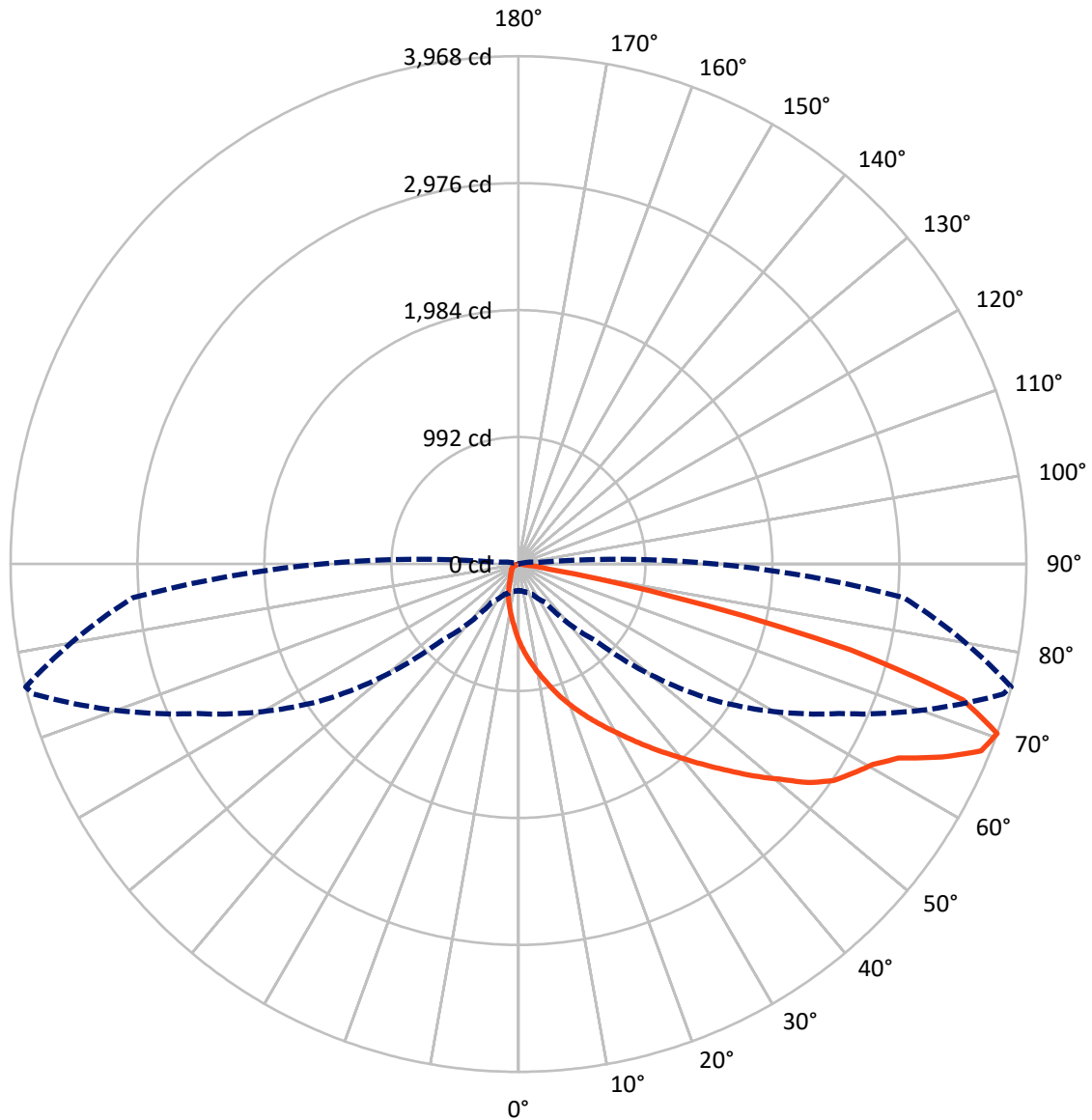
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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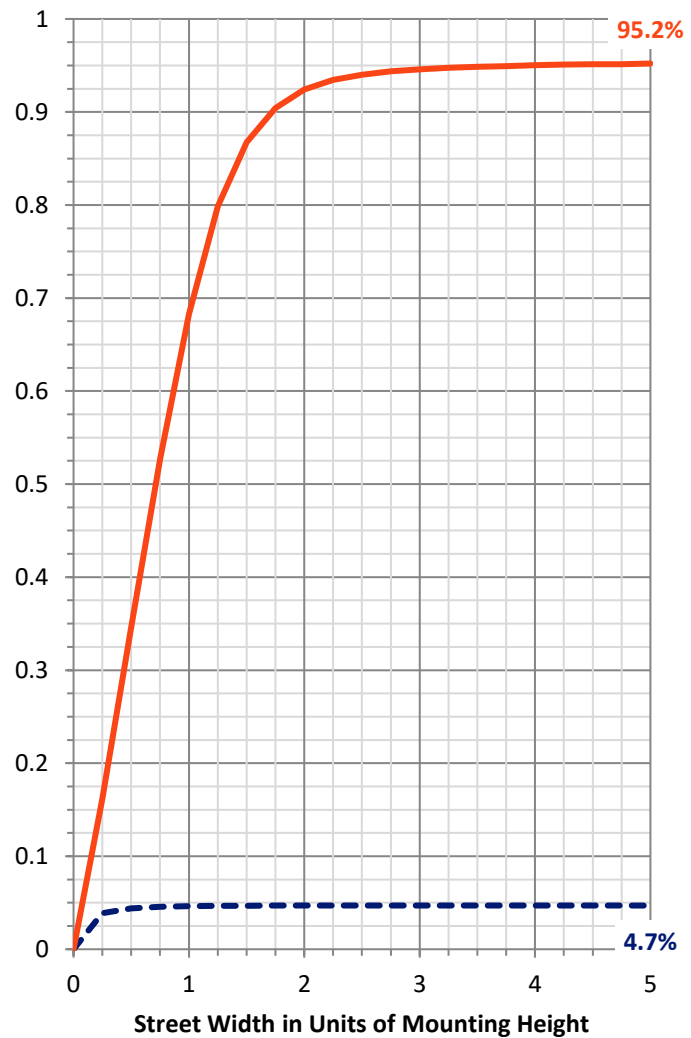
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	211.4	0.0	211.4
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	4270.6	0.0	4270.6
	% Fixture	95.3	0.0	95.3
Total	Lumens	4482.0	0.0	4482.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.5	1.3
10°-20°	182.4	4.1
20°-30°	339.7	7.6
30°-40°	600.9	13.4
40°-50°	918.9	20.5
50°-60°	1041.8	23.2
60°-70°	893.1	19.9
70°-80°	432.6	9.7
80°-90°	16.0	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°	4482.0	100.0
0°-180°	4482.0	100.0

Coefficient of Utilization



--- HS — SS

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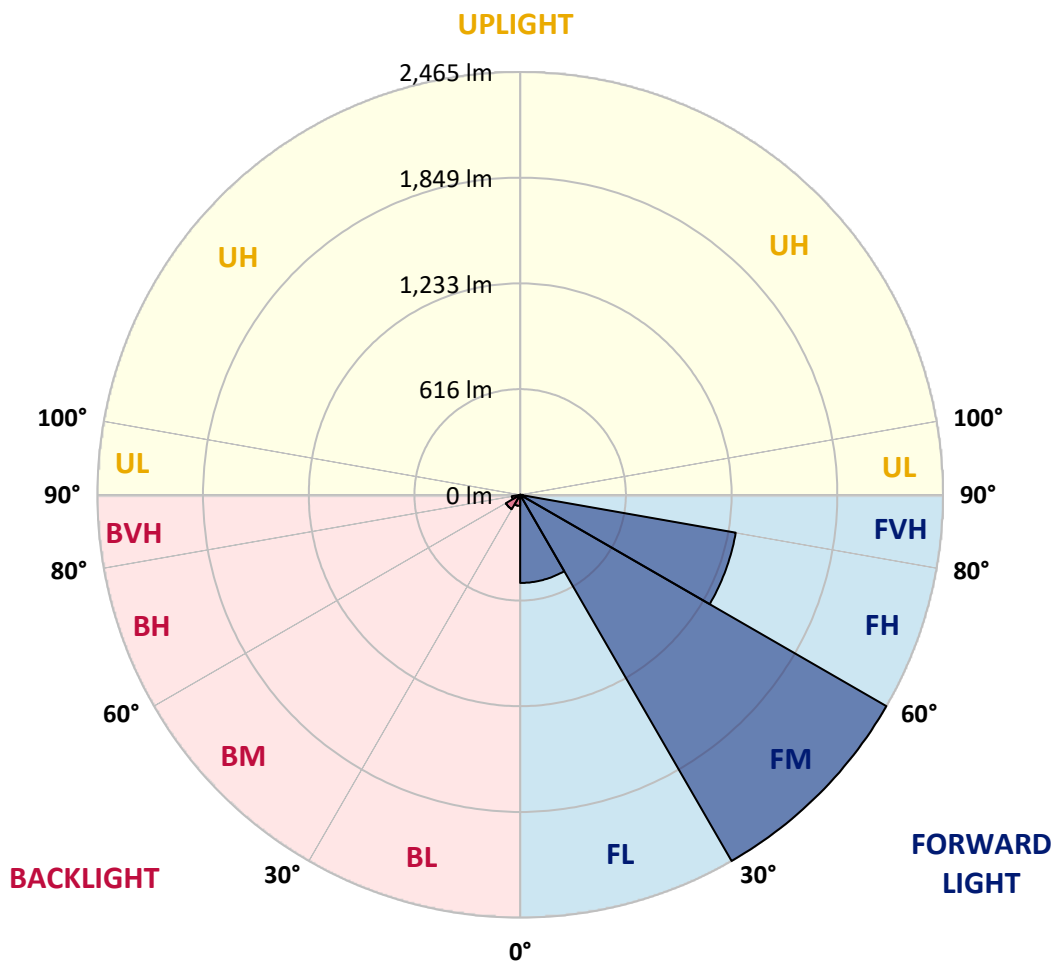
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	513.8	11.5			
FM	(30°-60°)	2465.1	55.0			
FH	(60°-80°)	1275.9	28.5			G1/1800
FVH	(80°-90°)	15.8	0.4			G1/100
BL	(0°-30°)	64.8	1.4	B0/110		
BM	(30°-60°)	96.5	2.2	B0/220		
BH	(60°-80°)	49.8	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°	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9
2.5°	820.1	815.6	811.1	794.0	778.3	764.1	737.2	702.2	670.8	664.1	627.6
5°	963.3	958.1	951.4	934.2	914.1	890.2	850.7	796.9	741.7	729.8	661.9
7.5°	1060.3	1055.9	1046.2	1038.0	1017.8	994.7	950.7	888.0	811.9	796.9	701.4
10°	1126.8	1123.8	1122.3	1115.6	1100.6	1082.0	1038.0	972.3	882.8	865.6	743.2
12.5°	1150.6	1150.6	1158.1	1169.3	1171.5	1165.6	1125.3	1059.6	957.4	939.5	792.5
15°	1118.6	1122.3	1138.7	1174.5	1211.8	1236.5	1211.1	1149.9	1039.5	1020.1	850.7
17.5°	1109.6	1113.3	1124.5	1155.9	1205.9	1271.5	1284.2	1237.2	1117.1	1100.6	910.4
20°	1135.0	1138.7	1148.4	1175.3	1213.3	1279.7	1332.7	1321.5	1199.1	1182.0	970.8
22.5°	1195.4	1197.7	1197.7	1218.5	1252.1	1301.4	1363.3	1401.4	1283.5	1264.8	1030.5
25°	1325.3	1320.8	1302.9	1292.4	1314.1	1354.4	1402.1	1471.5	1377.5	1352.1	1094.7
27.5°	1495.4	1510.3	1467.0	1417.0	1400.6	1423.7	1456.6	1533.4	1468.5	1441.7	1152.9
30°	1726.0	1720.0	1663.3	1591.6	1520.8	1512.5	1523.7	1586.4	1559.6	1534.2	1217.8
32.5°	1915.5	1926.7	1867.0	1779.7	1673.7	1623.7	1611.8	1649.8	1656.6	1640.1	1294.7
35°	2110.3	2122.2	2064.0	1967.0	1840.9	1757.3	1723.0	1728.2	1776.7	1755.8	1375.2
37.5°	2284.9	2295.3	2237.9	2138.6	2012.5	1910.3	1861.0	1820.7	1893.1	1874.5	1460.3
40°	2417.7	2419.2	2380.4	2291.6	2172.2	2066.2	2010.3	1931.2	2016.2	2003.5	1549.1
42.5°	2511.7	2514.7	2486.3	2410.2	2299.8	2201.3	2155.8	2061.7	2158.0	2146.8	1652.1
45°	2555.7	2561.0	2558.0	2487.8	2396.0	2311.0	2296.1	2200.5	2313.2	2302.8	1770.7
47.5°	2513.9	2513.9	2552.0	2542.3	2458.0	2401.3	2418.4	2345.3	2481.9	2472.2	1891.6
50°	2340.1	2342.3	2419.9	2531.1	2481.9	2469.2	2522.9	2487.1	2634.8	2640.8	2036.4
52.5°	1883.4	1879.7	2141.6	2355.0	2465.4	2499.8	2619.2	2631.8	2818.4	2836.3	2180.4
55°	1407.3	1405.1	1655.8	2043.1	2350.5	2484.1	2672.9	2760.9	2975.1	2986.3	2287.8
57.5°	1114.1	1108.1	1246.2	1646.9	2090.9	2414.0	2675.1	2785.6	3062.4	3081.8	2392.3
60°	856.6	851.4	954.4	1225.3	1723.0	2227.4	2611.0	2787.1	3146.7	3181.0	2532.6
62.5°	612.6	618.6	697.7	879.0	1325.3	1964.0	2527.4	2807.9	3296.7	3335.5	2731.8
65°	413.4	410.4	476.1	598.5	942.5	1609.6	2399.0	2852.0	3566.8	3634.7	2970.6
67.5°	287.3	289.5	319.4	389.5	598.5	1235.7	2185.6	2876.6	3845.9	3898.9	3137.8
70°	207.4	210.4	226.8	261.9	365.6	838.0	1847.6	2763.9	3921.3	3967.5	3021.4
72.5°	136.6	142.5	167.1	185.8	233.6	524.6	1361.1	2381.1	3596.7	3631.0	2534.8
75°	73.9	75.4	107.5	138.8	166.4	326.8	811.9	1605.8	2690.8	2679.6	1671.5
77.5°	57.5	59.7	66.4	99.2	111.9	179.8	320.9	725.3	1274.5	1240.2	570.1
80°	35.1	36.6	46.3	58.9	78.4	104.5	94.0	197.0	258.9	242.5	83.6
82.5°	20.9	22.4	27.6	49.2	61.9	49.2	32.8	47.8	48.5	47.8	20.9
85°	3.7	3.7	19.4	34.3	32.8	14.2	19.4	15.7	14.2	14.9	4.5
87.5°	0.0	0.0	7.5	10.4	14.9	5.2	7.5	3.7	3.7	3.7	2.2
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°	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9	599.9
2.5°	605.2	579.8	527.6	482.0	436.5	402.9	377.6	351.5	342.5	331.3	325.3
5°	615.6	565.6	461.9	379.1	308.9	255.2	220.9	200.0	186.5	176.8	174.6
7.5°	631.3	554.4	408.9	297.0	220.1	166.4	138.0	123.9	116.4	111.9	110.4
10°	649.9	544.7	356.7	231.3	155.2	117.2	101.5	95.5	92.5	91.0	90.3
12.5°	676.1	541.0	312.7	178.3	117.2	96.3	88.1	84.3	82.1	79.8	79.1
15°	710.4	542.5	272.4	138.0	97.0	85.8	79.1	75.4	72.4	70.1	70.1
17.5°	746.2	544.7	232.8	111.9	88.1	78.4	70.9	65.7	63.4	61.2	60.4
20°	779.8	544.0	194.8	95.5	79.8	70.1	62.7	57.5	53.7	51.5	51.5
22.5°	811.9	539.5	158.9	85.8	73.1	61.9	53.7	48.5	45.5	43.3	43.3
25°	846.2	530.5	129.8	78.4	64.9	54.5	46.3	41.0	38.8	36.6	36.6
27.5°	873.1	515.6	106.0	71.6	57.5	47.0	39.5	35.1	32.8	31.3	31.3
30°	902.2	494.0	88.1	64.2	50.0	40.3	33.6	29.8	27.6	26.9	26.9
32.5°	934.2	470.1	75.4	56.7	42.5	34.3	28.4	26.1	23.9	23.1	23.1
35°	971.6	449.2	67.9	49.2	37.3	29.1	24.6	22.4	20.9	20.9	20.9
37.5°	1014.1	427.6	61.2	43.3	32.1	24.6	20.9	20.1	19.4	18.7	18.7
40°	1060.3	404.4	55.2	38.1	27.6	20.9	17.9	17.9	17.2	17.2	17.2
42.5°	1112.6	384.3	50.0	33.6	23.9	17.9	15.7	15.7	14.9	14.9	14.9
45°	1169.3	365.6	45.5	29.8	20.9	15.7	14.2	13.4	12.7	12.7	12.7
47.5°	1236.5	355.2	41.8	26.1	17.9	13.4	11.9	11.2	10.4	9.7	9.7
50°	1322.3	359.7	38.1	21.6	15.7	11.2	9.7	9.0	8.2	7.5	7.5
52.5°	1390.2	357.4	32.8	18.7	12.7	9.0	7.5	6.7	6.0	5.2	5.2
55°	1439.4	348.5	28.4	15.7	9.7	7.5	6.0	4.5	3.7	3.7	3.7
57.5°	1487.9	339.5	23.9	12.7	7.5	5.2	3.7	3.0	3.0	3.0	3.0
60°	1563.3	326.8	20.9	10.4	6.0	3.7	2.2	2.2	1.5	1.5	1.5
62.5°	1655.1	311.2	17.2	9.0	4.5	3.0	1.5	1.5	0.0	0.0	0.0
65°	1755.8	283.6	14.2	6.7	3.7	2.2	1.5	0.0	0.0	0.0	0.0
67.5°	1732.7	227.6	11.9	4.5	3.0	1.5	0.7	0.0	0.0	0.0	0.0
70°	1532.7	153.7	9.7	3.7	2.2	1.5	0.7	0.0	0.0	0.0	0.0
72.5°	1200.6	91.0	6.7	3.0	1.5	0.7	0.0	0.0	0.0	0.0	0.0
75°	768.6	45.5	4.5	2.2	1.5	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	257.4	22.4	3.0	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	36.6	7.5	1.5	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	8.2	3.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.7	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)