

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: P348797

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4273 lumens
Efficiency: N/A
Efficacy: 82.2 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

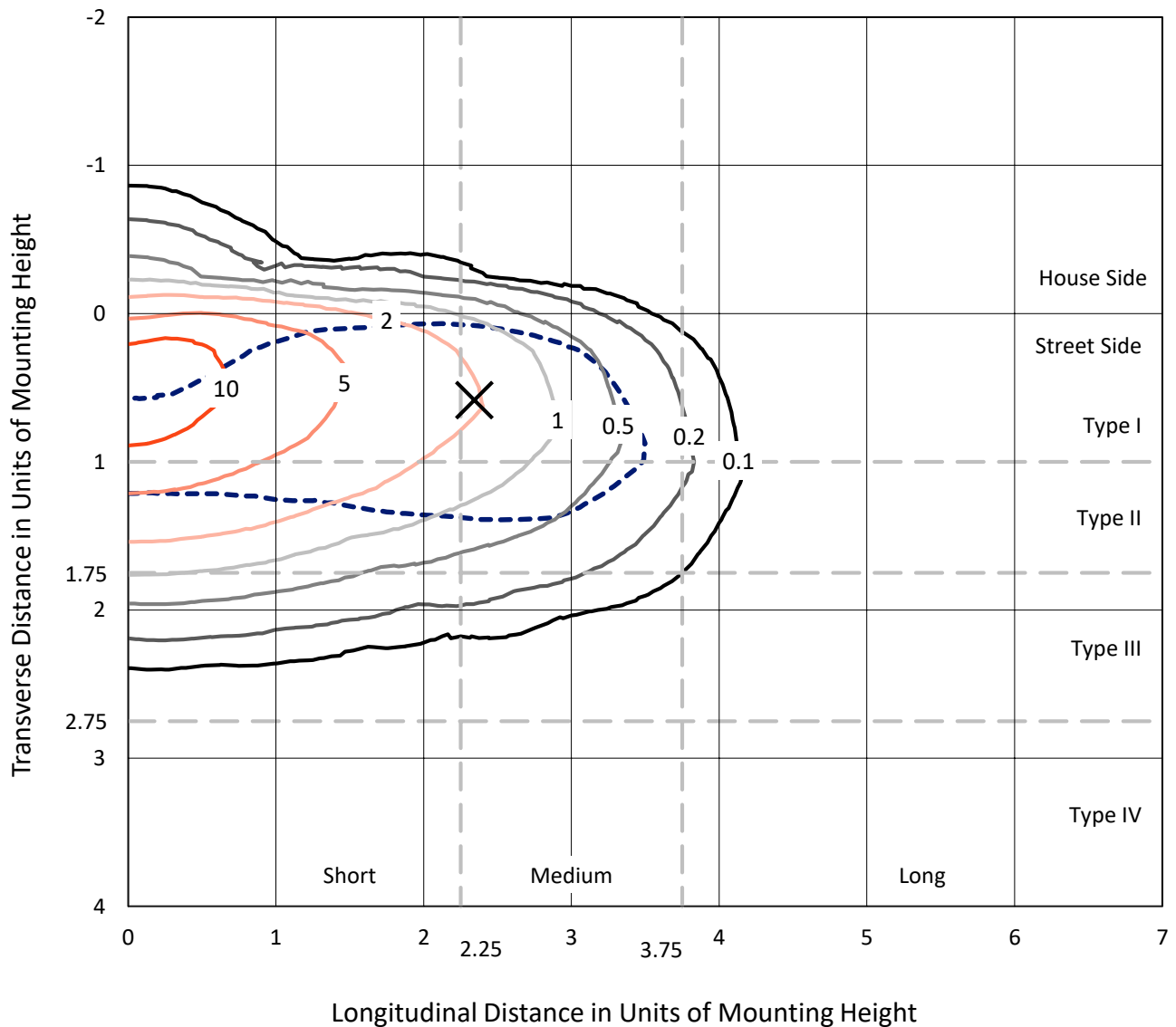
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

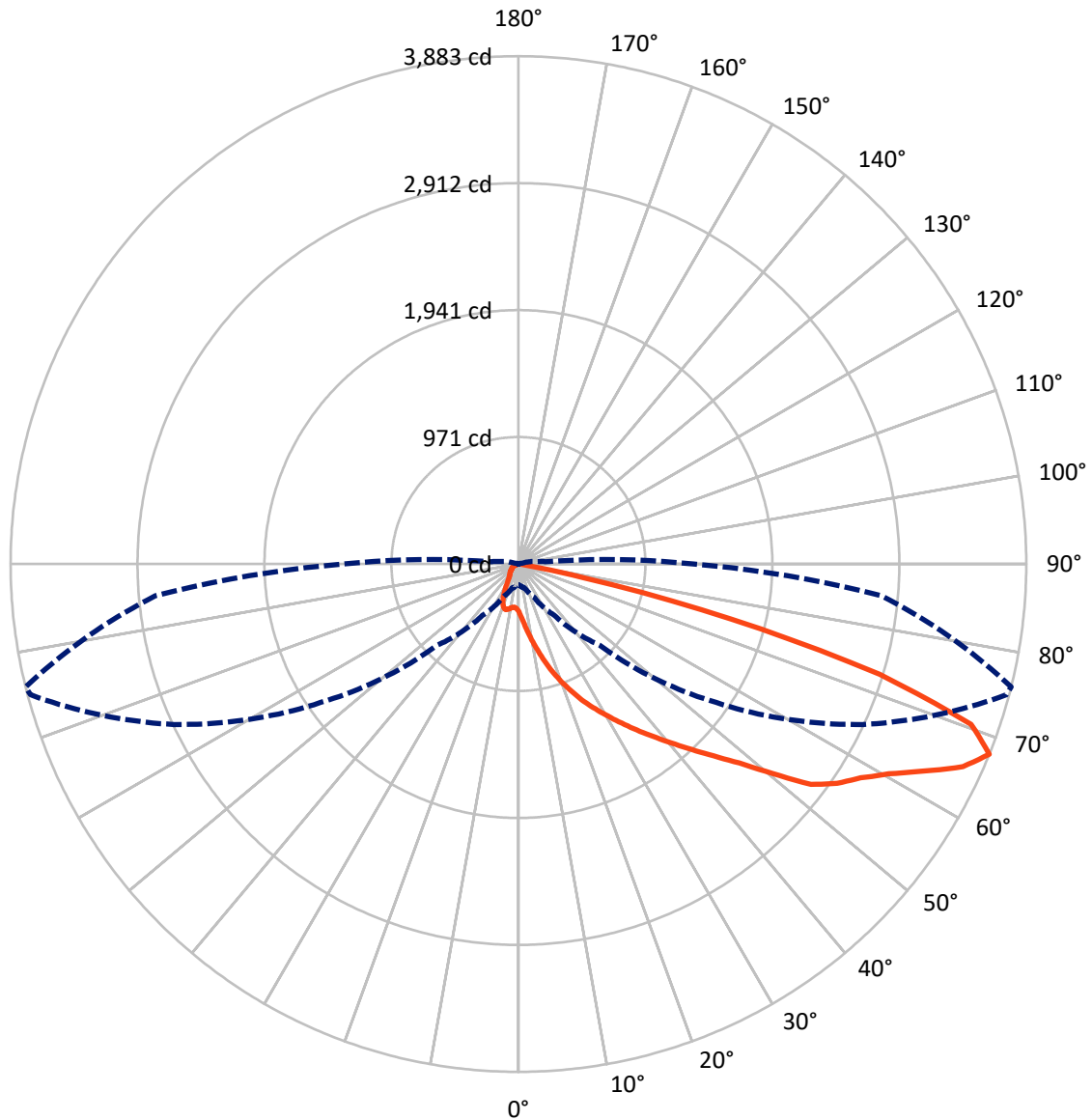
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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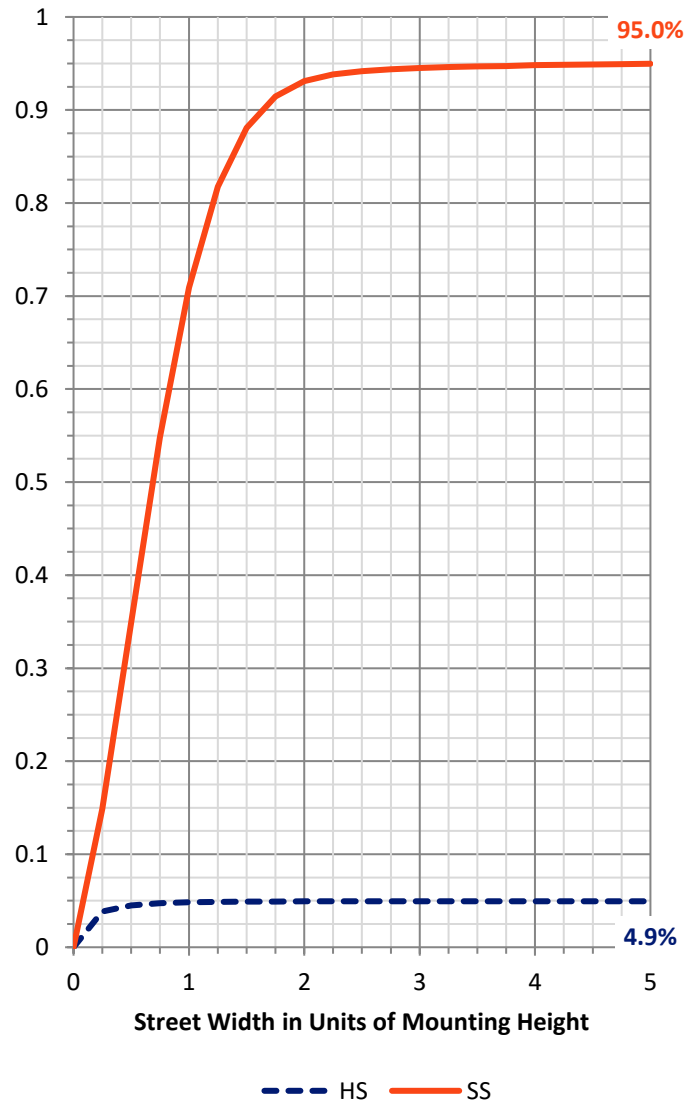
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	212.2	0.0	212.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4060.8	0.0	4060.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	4273.0	0.0	4273.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.1	1.1
10°-20°	178.7	4.2
20°-30°	363.5	8.5
30°-40°	631.0	14.8
40°-50°	891.5	20.9
50°-60°	1011.0	23.7
60°-70°	838.6	19.6
70°-80°	303.7	7.1
80°-90°	9.8	0.2
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°	4273.0	100.0
0°-180°	4273.0	100.0



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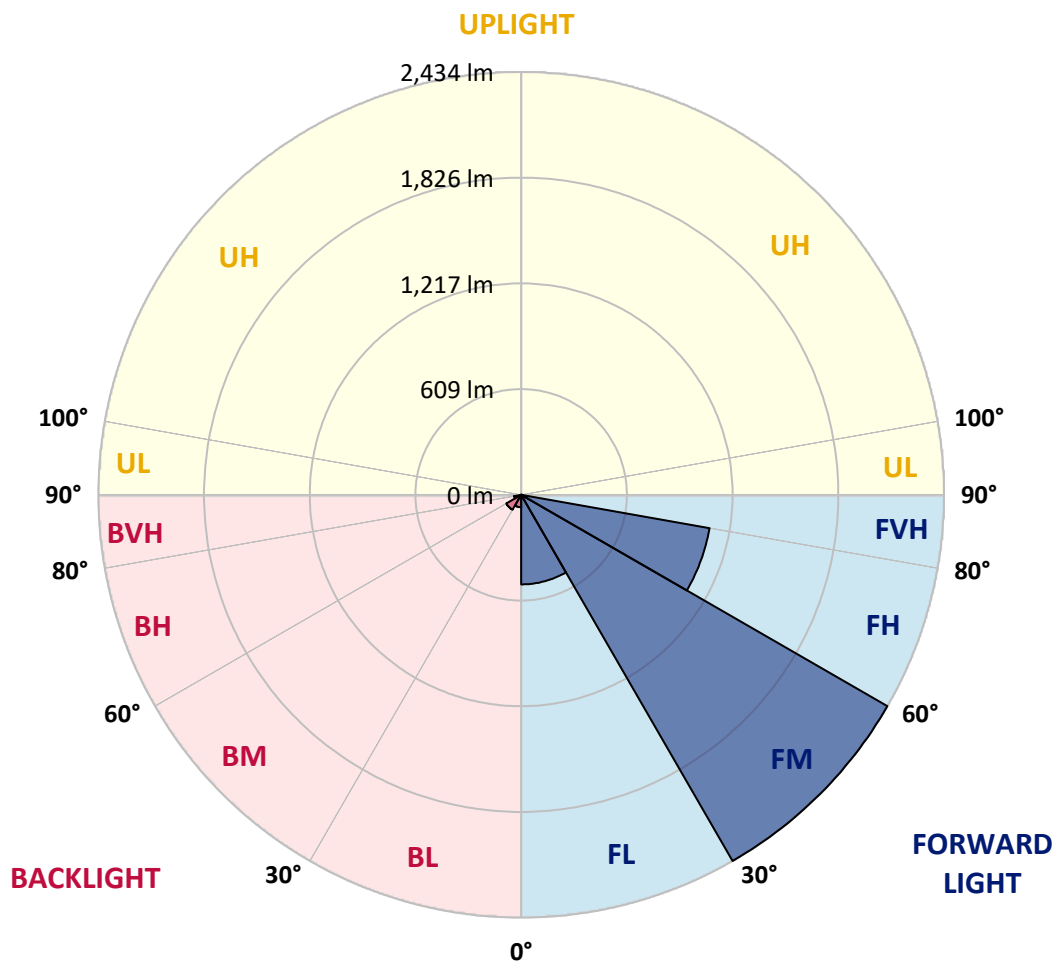
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	515.7	12.1			
FM	(30°-60°)	2434.2	57.0			
FH	(60°-80°)	1101.3	25.8			G1/1800
FVH	(80°-90°)	9.5	0.2			G0/10
BL	(0°-30°)	71.6	1.7	B0/110		
BM	(30°-60°)	99.3	2.3	B0/220		
BH	(60°-80°)	41.0	1.0	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°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	541.1	528.9	531.7	523.9	509.6	480.4	455.5	431.9	404.4	403.5	380.8
5°	729.6	719.3	718.0	702.1	676.3	626.7	578.3	523.3	461.9	457.4	409.3
7.5°	900.8	892.5	889.5	870.6	822.5	774.2	711.3	630.4	534.3	526.1	447.7
10°	1032.2	1028.3	1029.0	1015.5	974.3	929.4	846.8	743.7	616.5	603.8	493.7
12.5°	1131.8	1132.7	1139.5	1131.2	1108.2	1074.9	986.7	864.4	707.5	690.1	546.3
15°	1205.0	1209.7	1222.0	1232.3	1230.7	1201.8	1120.9	987.1	804.1	784.9	604.9
17.5°	1252.4	1257.6	1275.6	1298.4	1319.4	1312.7	1250.5	1105.4	901.9	879.6	667.7
20°	1293.9	1300.1	1319.4	1349.5	1388.7	1397.1	1356.3	1220.2	999.4	972.3	732.4
22.5°	1384.0	1383.8	1395.6	1413.2	1450.5	1472.2	1446.3	1326.7	1095.8	1067.6	798.5
25°	1546.9	1540.7	1536.6	1522.7	1531.0	1544.4	1530.0	1426.3	1192.8	1164.2	865.6
27.5°	1740.5	1744.2	1710.9	1673.6	1644.8	1630.9	1607.4	1518.6	1286.1	1254.6	931.1
30°	1944.7	1945.9	1906.5	1859.0	1795.5	1742.9	1702.1	1606.8	1381.9	1347.7	994.7
32.5°	2129.0	2121.7	2082.7	2017.9	1937.8	1878.6	1793.8	1705.3	1483.4	1450.3	1065.5
35°	2275.0	2266.4	2219.0	2160.1	2076.9	2017.4	1915.3	1803.6	1590.1	1557.7	1136.5
37.5°	2381.7	2371.6	2322.9	2262.3	2190.6	2155.9	2056.3	1910.5	1706.6	1671.8	1211.2
40°	2418.8	2410.0	2379.5	2335.1	2277.4	2269.6	2205.9	2033.5	1833.3	1796.3	1295.8
42.5°	2396.7	2388.1	2377.2	2362.3	2338.3	2345.8	2347.1	2173.7	1974.1	1937.6	1389.2
45°	2309.1	2301.4	2312.6	2334.6	2364.3	2401.4	2475.9	2324.4	2131.4	2092.5	1497.3
47.5°	2180.1	2174.5	2205.6	2260.2	2347.3	2449.5	2593.7	2482.8	2308.0	2271.8	1632.1
50°	1996.6	1995.7	2057.8	2157.6	2291.5	2472.7	2715.4	2662.9	2553.2	2515.2	1819.5
52.5°	1710.9	1712.8	1835.0	1994.7	2193.6	2457.0	2793.6	2894.4	2838.6	2799.1	1981.8
55°	1438.9	1450.1	1536.8	1767.1	2043.4	2398.6	2820.6	3002.4	2996.0	2958.6	2072.1
57.5°	1172.4	1192.8	1276.3	1491.5	1824.2	2264.0	2805.8	3049.2	3113.2	3084.6	2191.1
60°	883.7	893.1	989.3	1190.4	1542.8	2018.3	2698.5	3074.7	3273.5	3253.7	2363.9
62.5°	562.2	585.7	671.0	865.0	1201.3	1677.2	2517.7	3074.3	3474.0	3484.9	2586.9
65°	296.2	323.5	368.8	536.0	825.5	1296.2	2245.6	3045.5	3720.0	3735.2	2761.2
67.5°	159.7	167.6	191.5	278.2	478.7	878.1	1845.9	2903.2	3862.5	3882.6	2785.6
70°	116.8	121.1	130.1	153.9	241.0	510.0	1346.9	2580.6	3678.9	3671.4	2475.0
72.5°	89.7	96.4	103.2	112.7	138.5	272.2	838.6	2020.8	2935.4	2885.9	1850.0
75°	70.8	71.9	81.4	90.1	103.9	155.0	372.4	1176.9	1791.6	1674.6	959.4
77.5°	56.5	57.3	62.9	70.4	83.5	101.9	115.3	463.0	572.0	510.4	208.2
80°	33.5	35.4	46.8	54.3	69.3	64.2	42.1	100.5	89.3	80.9	35.0
82.5°	18.7	20.2	26.4	42.9	48.3	30.7	21.0	27.1	21.0	20.4	9.9
85°	0.0	0.9	17.0	26.6	19.7	6.7	8.8	9.0	6.2	5.8	3.9
87.5°	0.0	0.0	5.2	5.1	0.7	1.1	2.1	3.0	2.4	2.4	2.1
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°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	369.6	359.5	340.4	321.7	305.9	293.0	281.4	276.7	273.0	272.4	269.4
5°	386.1	365.7	329.1	299.2	279.2	264.9	252.8	245.3	239.5	237.2	235.2
7.5°	411.0	380.1	327.6	293.2	269.2	245.3	222.8	198.5	183.3	177.5	174.1
10°	441.3	399.2	333.3	291.5	249.6	199.0	161.8	130.9	118.3	114.2	113.1
12.5°	476.7	422.9	343.0	281.0	207.6	141.4	111.6	101.1	98.3	97.0	97.0
15°	517.3	449.0	349.9	250.7	153.5	106.9	96.6	91.7	88.7	87.1	87.2
17.5°	558.9	474.4	346.6	206.7	113.3	95.1	87.4	82.2	78.1	76.4	76.0
20°	600.8	498.0	327.8	153.9	95.9	86.3	77.7	71.9	67.8	66.1	65.7
22.5°	644.3	518.1	294.9	112.9	86.1	76.6	68.2	62.3	58.4	56.9	56.2
25°	686.6	534.3	248.8	91.4	77.0	67.4	59.4	53.9	50.4	48.9	48.7
27.5°	726.1	544.6	195.5	80.7	68.9	59.2	51.9	47.0	44.0	42.9	42.7
30°	761.6	545.6	144.5	72.8	61.8	52.0	45.3	41.0	38.4	37.3	36.9
32.5°	797.6	537.7	105.2	65.7	55.2	45.9	39.3	35.9	34.1	33.1	33.1
35°	831.5	519.6	82.0	59.5	48.9	39.9	34.6	32.2	31.1	30.1	30.1
37.5°	864.6	493.5	69.6	54.1	42.9	34.8	30.5	29.0	28.1	27.1	27.1
40°	898.3	460.8	63.3	49.1	38.0	30.9	27.1	25.8	24.9	24.2	24.0
42.5°	939.7	422.9	59.2	44.4	33.7	27.3	24.0	22.5	21.7	21.0	20.6
45°	987.6	390.4	55.8	39.7	30.1	24.3	20.8	19.3	18.2	17.2	17.0
47.5°	1056.7	366.8	51.3	34.6	26.8	21.2	18.0	16.3	14.6	13.7	13.5
50°	1144.9	347.3	45.5	30.1	23.4	18.0	15.0	12.9	11.4	10.5	10.5
52.5°	1188.7	321.8	40.3	26.2	19.7	15.2	12.2	9.7	9.0	8.1	8.1
55°	1206.3	302.4	35.0	22.3	16.3	12.5	9.5	7.5	6.9	6.4	6.2
57.5°	1255.7	296.8	30.5	18.9	13.5	9.9	7.3	5.6	5.2	4.5	4.5
60°	1335.3	299.6	26.4	16.1	10.9	7.7	5.4	4.3	3.9	3.2	3.2
62.5°	1421.3	296.0	22.3	13.9	8.4	5.6	3.7	3.2	3.2	1.9	1.7
65°	1437.7	263.6	19.1	11.4	6.6	4.1	2.4	2.1	2.8	0.4	0.0
67.5°	1334.4	204.5	16.5	8.8	4.9	3.2	1.9	0.9	2.4	0.0	0.0
70°	1067.0	129.9	13.3	6.4	3.7	2.6	1.5	0.4	1.9	0.0	0.0
72.5°	754.5	75.5	10.5	4.5	3.2	2.1	1.1	0.0	1.1	0.0	0.0
75°	381.6	40.3	6.6	3.4	2.4	1.5	0.7	0.0	0.2	0.0	0.0
77.5°	82.6	18.7	4.1	2.4	1.7	0.9	0.4	0.0	0.0	0.0	0.0
80°	18.0	8.2	2.6	1.5	0.9	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	6.6	4.3	1.3	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.6	2.2	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	0.7	0.2	0.2	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)