

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: P397941

Luminaire Tested: **ARCH-S-PA1-60-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397941
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-PA1-60-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 800mA 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: 5146 lumens
Efficiency: N/A
Efficacy: 80.4 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

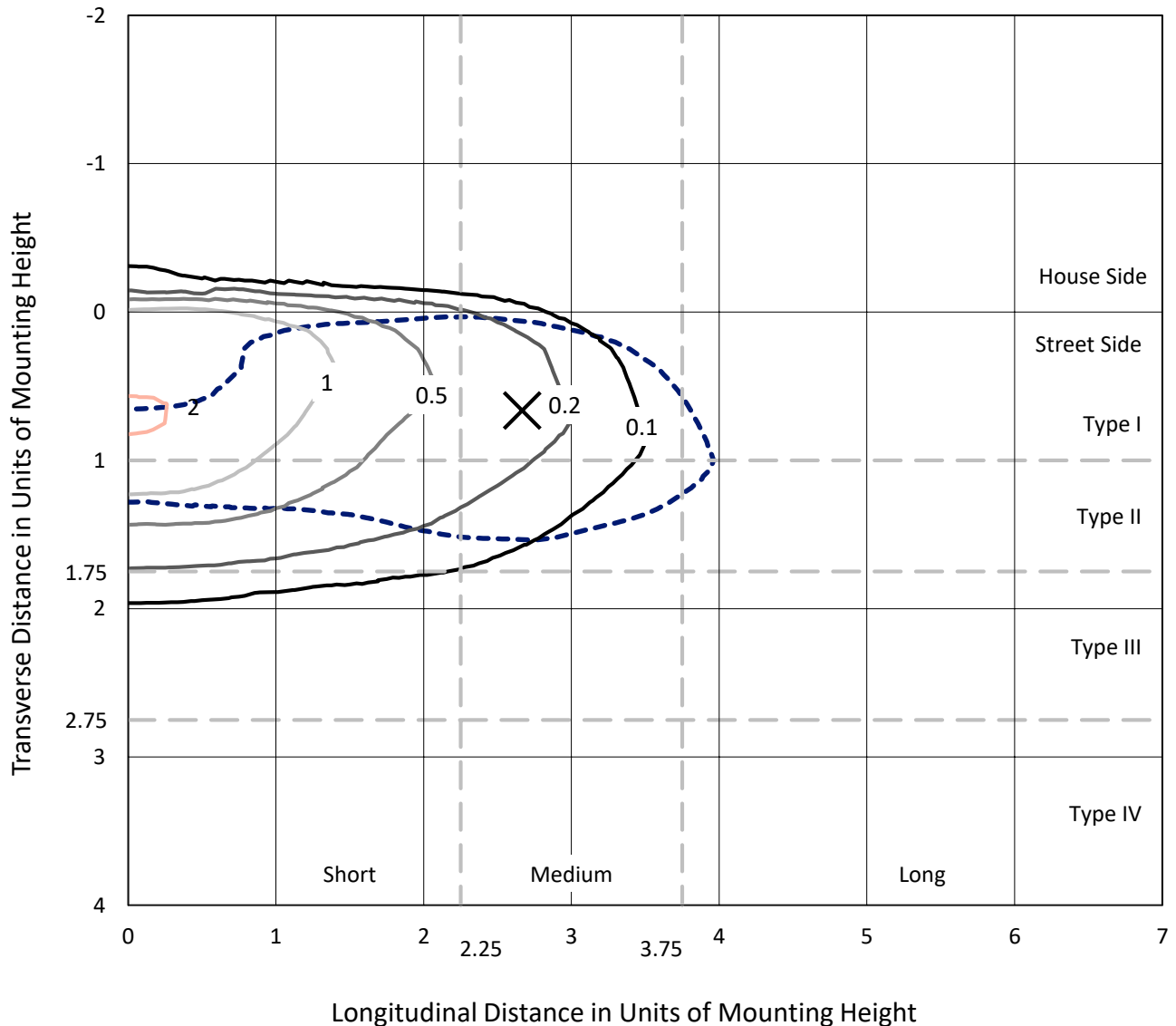
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

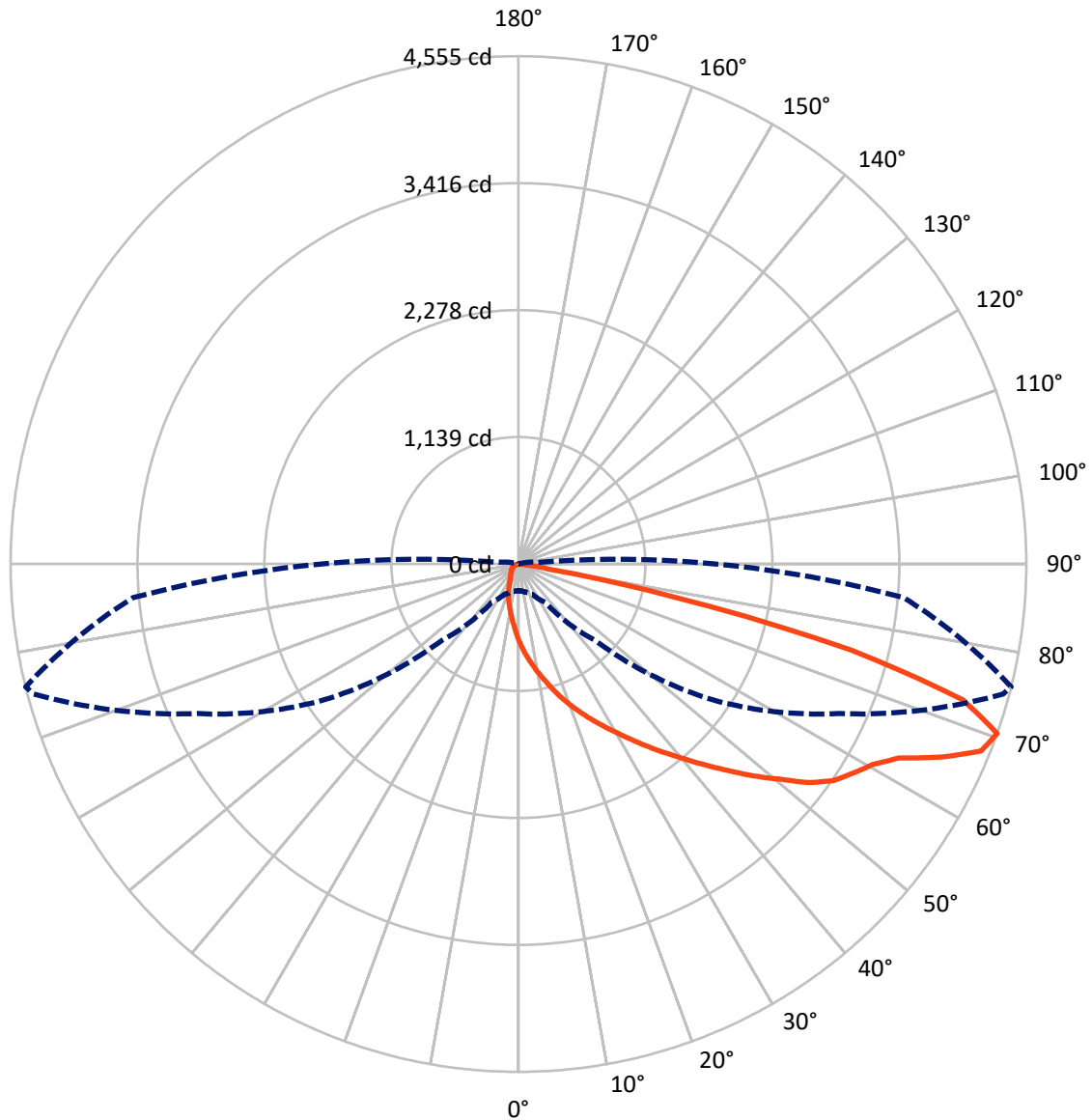
× Max cd
 - - - 1/2 Max cd



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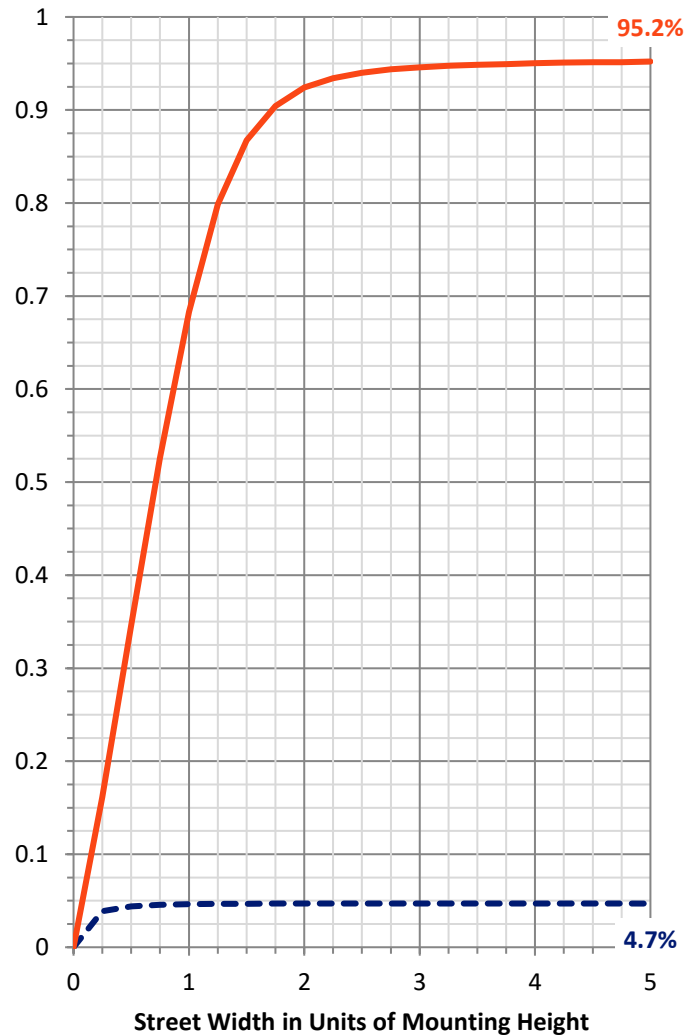
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	242.7	0.0	242.7
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	4903.3	0.0	4903.3
	% Fixture	95.3	0.0	95.3
Total	Lumens	5146.0	0.0	5146.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.3
10°-20°	209.4	4.1
20°-30°	390.1	7.6
30°-40°	689.9	13.4
40°-50°	1055.0	20.5
50°-60°	1196.2	23.2
60°-70°	1025.4	19.9
70°-80°	496.7	9.7
80°-90°	18.4	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°	5146.0	100.0
0°-180°	5146.0	100.0



--- HS — SS

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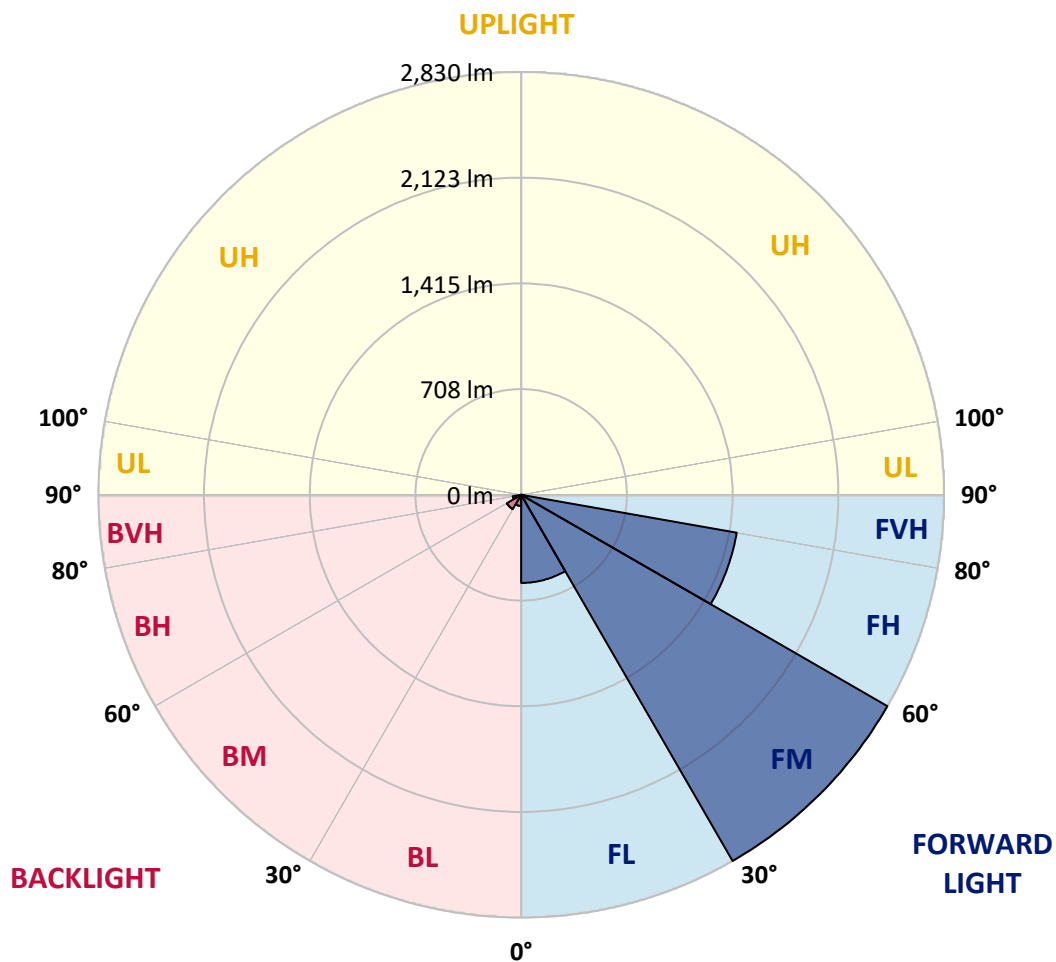
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	589.9	11.5			
FM (30°-60°)	2830.3	55.0			
FH (60°-80°)	1464.9	28.5			G1/1800
FVH (80°-90°)	18.1	0.4			G1/100
BL (0°-30°)	74.5	1.4	B0/110		
BM (30°-60°)	110.8	2.2	B0/220		
BH (60°-80°)	57.1	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°	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8
2.5°	941.6	936.4	931.3	911.6	893.6	877.3	846.5	806.2	770.2	762.5	720.5
5°	1106.1	1100.1	1092.4	1072.6	1049.5	1022.1	976.7	915.0	851.6	837.9	759.9
7.5°	1217.4	1212.3	1201.2	1191.7	1168.6	1142.0	1091.5	1019.5	932.1	915.0	805.3
10°	1293.7	1290.3	1288.5	1280.8	1263.7	1242.3	1191.7	1116.3	1013.5	993.8	853.3
12.5°	1321.1	1321.1	1329.7	1342.5	1345.1	1338.2	1292.0	1216.6	1099.2	1078.6	909.9
15°	1284.3	1288.5	1307.4	1348.5	1391.4	1419.6	1390.5	1320.2	1193.4	1171.2	976.7
17.5°	1274.0	1278.3	1291.1	1327.1	1384.5	1459.9	1474.5	1420.5	1282.6	1263.7	1045.2
20°	1303.1	1307.4	1318.5	1349.4	1393.1	1469.3	1530.2	1517.3	1376.8	1357.1	1114.6
22.5°	1372.5	1375.1	1375.1	1399.1	1437.6	1494.2	1565.3	1609.0	1473.6	1452.2	1183.2
25°	1521.6	1516.4	1495.9	1483.9	1508.7	1555.0	1609.8	1689.5	1581.6	1552.4	1256.8
27.5°	1716.9	1734.1	1684.4	1627.0	1608.1	1634.7	1672.4	1760.6	1686.1	1655.2	1323.7
30°	1981.7	1974.8	1909.7	1827.4	1746.1	1736.6	1749.5	1821.4	1790.6	1761.5	1398.2
32.5°	2199.3	2212.1	2143.6	2043.3	1921.7	1864.3	1850.6	1894.3	1902.0	1883.1	1486.5
35°	2422.9	2436.6	2369.8	2258.4	2113.6	2017.6	1978.2	1984.2	2039.9	2015.9	1579.0
37.5°	2623.4	2635.4	2569.4	2455.4	2310.6	2193.3	2136.7	2090.5	2173.6	2152.2	1676.7
40°	2775.9	2777.6	2733.0	2631.1	2494.0	2372.3	2308.1	2217.3	2314.9	2300.4	1778.6
42.5°	2883.8	2887.2	2854.7	2767.3	2640.5	2527.4	2475.1	2367.2	2477.7	2464.9	1896.8
45°	2934.4	2940.4	2936.9	2856.4	2751.0	2653.3	2636.2	2526.5	2655.9	2643.9	2033.1
47.5°	2886.4	2886.4	2930.1	2918.9	2822.1	2757.0	2776.7	2692.8	2849.5	2838.4	2171.9
50°	2686.8	2689.3	2778.4	2906.1	2849.5	2835.0	2896.7	2855.5	3025.2	3032.0	2338.1
52.5°	2162.4	2158.1	2458.9	2703.9	2830.7	2870.1	3007.2	3021.7	3235.9	3256.5	2503.4
55°	1615.8	1613.3	1901.1	2345.8	2698.8	2852.1	3068.9	3170.0	3415.9	3428.7	2626.8
57.5°	1279.1	1272.3	1430.8	1890.8	2400.6	2771.6	3071.4	3198.2	3516.1	3538.4	2746.7
60°	983.5	977.5	1095.8	1406.8	1978.2	2557.4	2997.8	3200.0	3612.9	3652.3	2907.8
62.5°	703.4	710.2	801.1	1009.2	1521.6	2255.0	2901.8	3223.9	3785.1	3829.7	3136.6
65°	474.6	471.2	546.6	687.1	1082.1	1848.0	2754.4	3274.5	4095.3	4173.2	3410.7
67.5°	329.8	332.4	366.7	447.2	687.1	1418.8	2509.4	3302.8	4415.7	4476.5	3602.6
70°	238.2	241.6	260.5	300.7	419.8	962.1	2121.3	3173.4	4502.2	4555.3	3469.0
72.5°	156.8	163.6	191.9	213.3	268.2	602.3	1562.7	2733.9	4129.5	4168.9	2910.4
75°	84.8	86.5	123.4	159.4	191.1	375.3	932.1	1843.7	3089.4	3076.6	1919.1
77.5°	66.0	68.5	76.3	113.9	128.5	206.5	368.4	832.8	1463.3	1423.9	654.6
80°	40.3	42.0	53.1	67.7	90.0	119.9	108.0	226.2	297.3	278.4	96.0
82.5°	24.0	25.7	31.7	56.5	71.1	56.5	37.7	54.8	55.7	54.8	24.0
85°	4.3	4.3	22.3	39.4	37.7	16.3	22.3	18.0	16.3	17.1	5.1
87.5°	0.0	0.0	8.6	12.0	17.1	6.0	8.6	4.3	4.3	4.3	2.6
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°	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8	688.8
2.5°	694.8	665.7	605.7	553.5	501.2	462.6	433.5	403.5	393.2	380.4	373.5
5°	706.8	649.4	530.3	435.2	354.7	293.0	253.6	229.6	214.2	203.0	200.5
7.5°	724.8	636.6	469.5	341.0	252.7	191.1	158.5	142.2	133.7	128.5	126.8
10°	746.2	625.4	409.5	265.6	178.2	134.5	116.5	109.7	106.2	104.5	103.7
12.5°	776.2	621.1	359.0	204.8	134.5	110.5	101.1	96.8	94.2	91.7	90.8
15°	815.6	622.9	312.7	158.5	111.4	98.5	90.8	86.5	83.1	80.5	80.5
17.5°	856.7	625.4	267.3	128.5	101.1	90.0	81.4	75.4	72.8	70.3	69.4
20°	895.3	624.6	223.6	109.7	91.7	80.5	72.0	66.0	61.7	59.1	59.1
22.5°	932.1	619.4	182.5	98.5	84.0	71.1	61.7	55.7	52.3	49.7	49.7
25°	971.6	609.1	149.1	90.0	74.5	62.5	53.1	47.1	44.6	42.0	42.0
27.5°	1002.4	592.0	121.7	82.2	66.0	54.0	45.4	40.3	37.7	36.0	36.0
30°	1035.8	567.2	101.1	73.7	57.4	46.3	38.6	34.3	31.7	30.8	30.8
32.5°	1072.6	539.8	86.5	65.1	48.8	39.4	32.6	30.0	27.4	26.6	26.6
35°	1115.5	515.8	78.0	56.5	42.8	33.4	28.3	25.7	24.0	24.0	24.0
37.5°	1164.3	490.9	70.3	49.7	36.8	28.3	24.0	23.1	22.3	21.4	21.4
40°	1217.4	464.4	63.4	43.7	31.7	24.0	20.6	20.6	19.7	19.7	19.7
42.5°	1277.4	441.2	57.4	38.6	27.4	20.6	18.0	18.0	17.1	17.1	17.1
45°	1342.5	419.8	52.3	34.3	24.0	18.0	16.3	15.4	14.6	14.6	14.6
47.5°	1419.6	407.8	48.0	30.0	20.6	15.4	13.7	12.9	12.0	11.1	11.1
50°	1518.2	413.0	43.7	24.8	18.0	12.9	11.1	10.3	9.4	8.6	8.6
52.5°	1596.1	410.4	37.7	21.4	14.6	10.3	8.6	7.7	6.9	6.0	6.0
55°	1652.7	400.1	32.6	18.0	11.1	8.6	6.9	5.1	4.3	4.3	4.3
57.5°	1708.4	389.8	27.4	14.6	8.6	6.0	4.3	3.4	3.4	3.4	3.4
60°	1794.9	375.3	24.0	12.0	6.9	4.3	2.6	2.6	1.7	1.7	1.7
62.5°	1900.3	357.3	19.7	10.3	5.1	3.4	1.7	1.7	0.0	0.0	0.0
65°	2015.9	325.6	16.3	7.7	4.3	2.6	1.7	0.0	0.0	0.0	0.0
67.5°	1989.4	261.3	13.7	5.1	3.4	1.7	0.9	0.0	0.0	0.0	0.0
70°	1759.8	176.5	11.1	4.3	2.6	1.7	0.9	0.0	0.0	0.0	0.0
72.5°	1378.5	104.5	7.7	3.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0
75°	882.5	52.3	5.1	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	295.6	25.7	3.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	42.0	8.6	1.7	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.4	3.4	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)