

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: P397752

Luminaire Tested: **ARCH-S-PA1-40-727-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397752
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-PA1-40-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA 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: 3954 lumens
Efficiency: N/A
Efficacy: 98.8 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

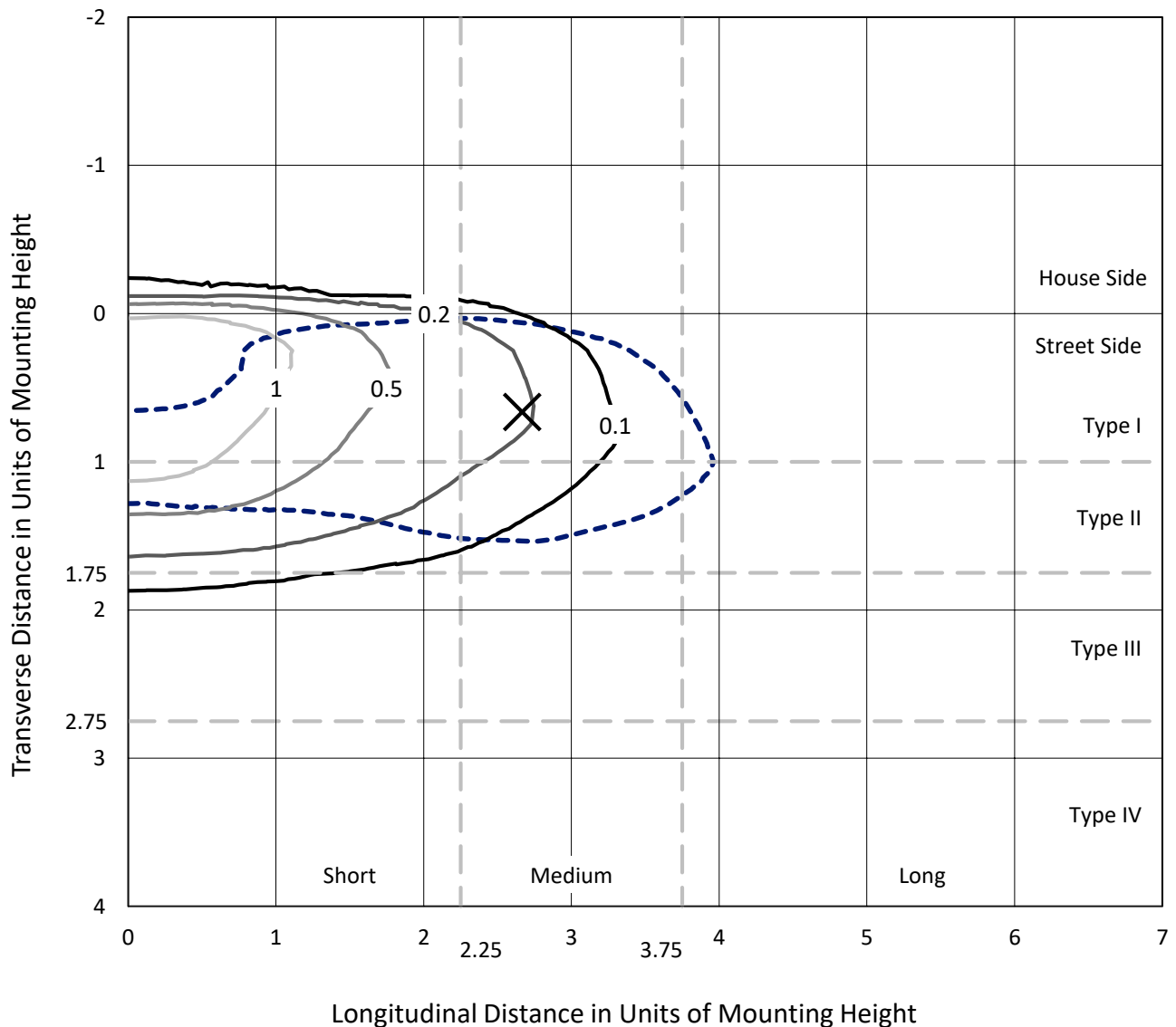
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397752
 CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

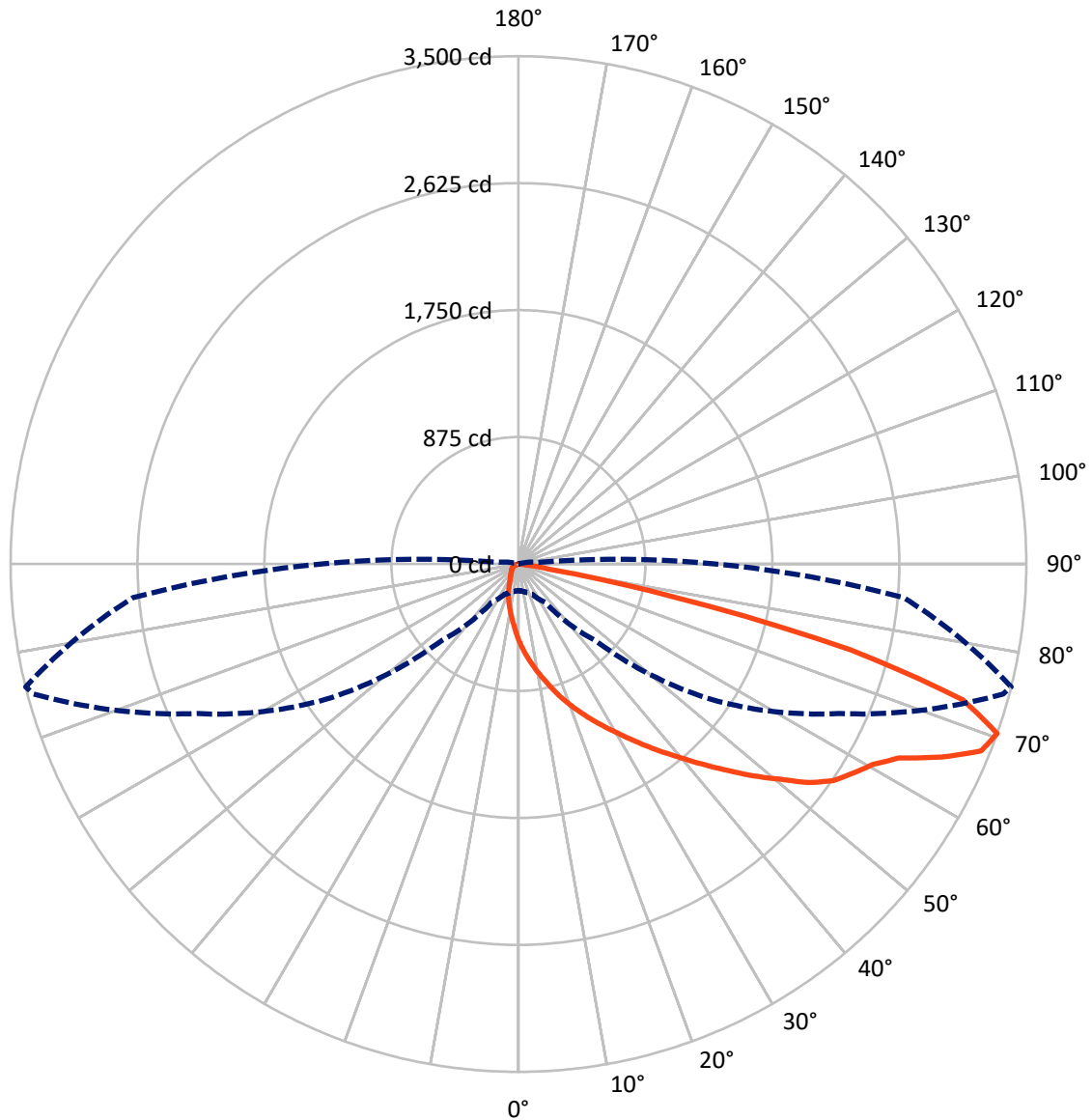
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P397752
CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P397752

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

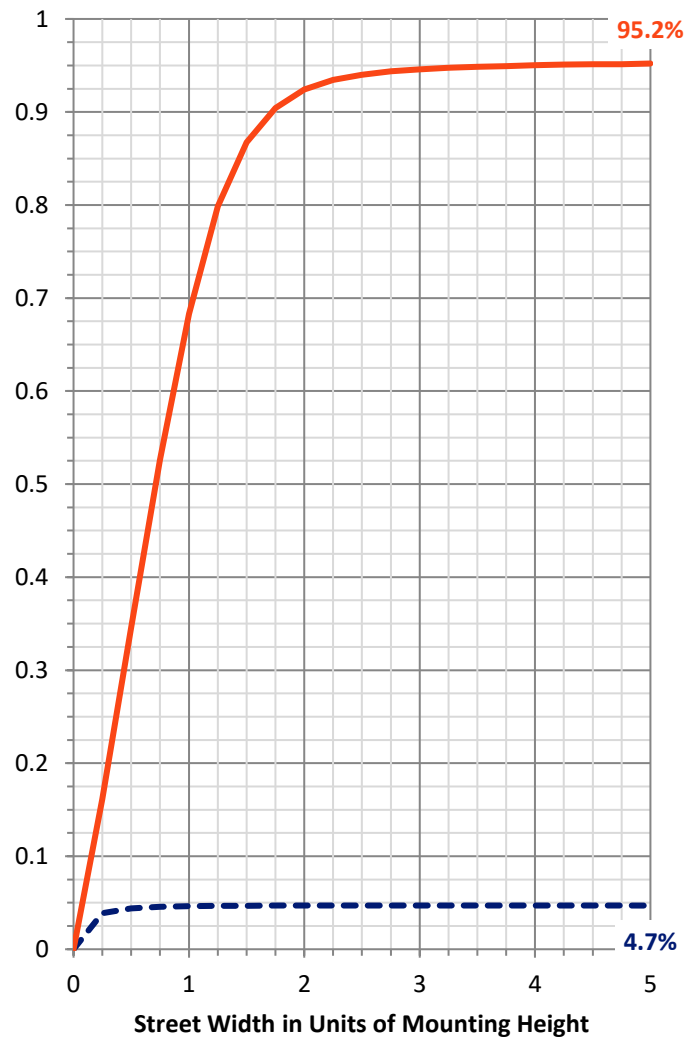
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	186.5	0.0	186.5
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	3767.5	0.0	3767.5
	% Fixture	95.3	0.0	95.3
Total	Lumens	3954.0	0.0	3954.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	1.3
10°-20°	160.9	4.1
20°-30°	299.7	7.6
30°-40°	530.1	13.4
40°-50°	810.7	20.5
50°-60°	919.1	23.2
60°-70°	787.9	19.9
70°-80°	381.6	9.7
80°-90°	14.2	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°	3954.0	100.0
0°-180°	3954.0	100.0



--- HS — SS

REPORT NUMBER: P397752

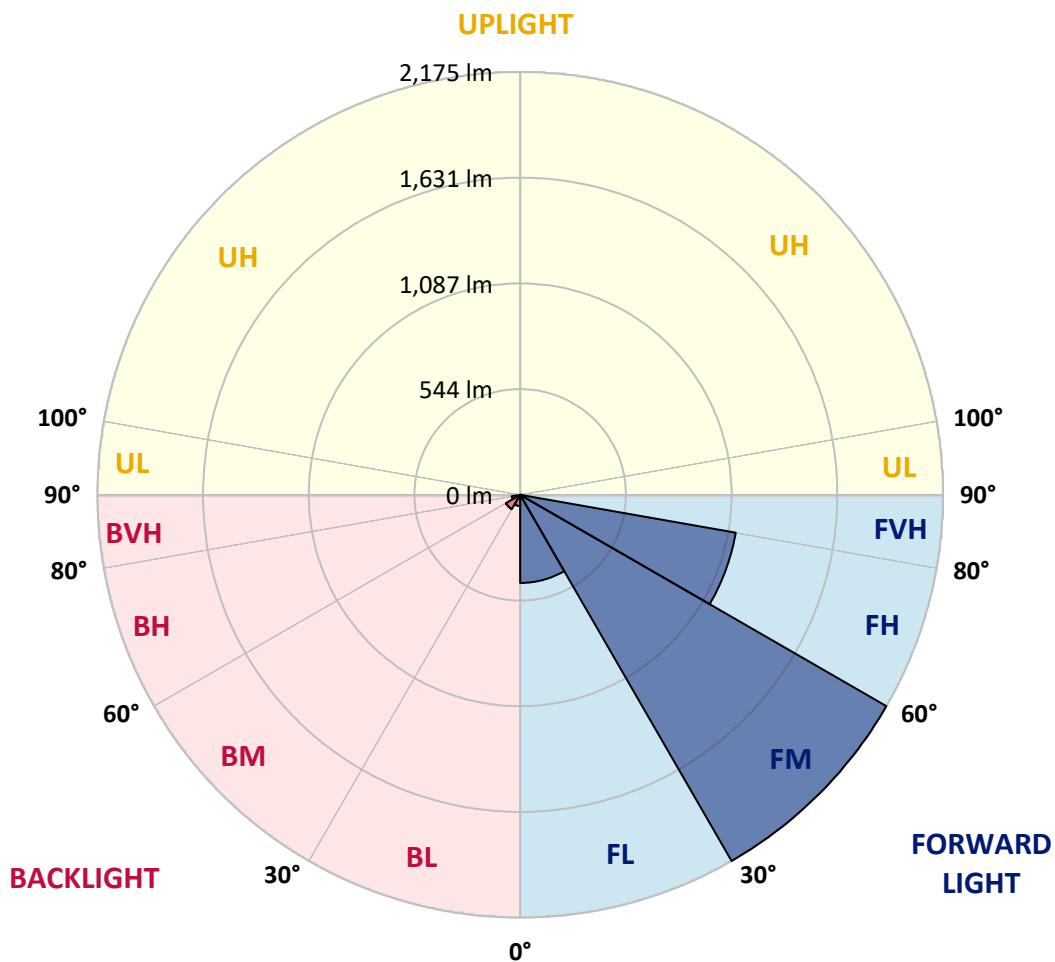
CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	453.3	11.5			
FM	(30°-60°)	2174.7	55.0			
FH	(60°-80°)	1125.6	28.5			G1/1800
FVH	(80°-90°)	13.9	0.4			G1/100
BL	(0°-30°)	57.2	1.4	B0/110		
BM	(30°-60°)	85.1	2.2	B0/220		
BH	(60°-80°)	43.9	1.1	B0/110		G0/110
BVH	(80°-90°)	0.2	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





REPORT NUMBER: P397752

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3
2.5°	723.5	719.5	715.6	700.4	686.6	674.1	650.4	619.5	591.8	585.9	553.6
5°	849.9	845.2	839.3	824.2	806.4	785.3	750.5	703.1	654.3	643.8	583.9
7.5°	935.4	931.5	922.9	915.7	897.9	877.5	838.7	783.4	716.2	703.1	618.8
10°	994.0	991.4	990.1	984.1	971.0	954.5	915.7	857.8	778.8	763.6	655.7
12.5°	1015.1	1015.1	1021.7	1031.5	1033.5	1028.3	992.7	934.8	844.6	828.8	699.1
15°	986.8	990.1	1004.6	1036.2	1069.1	1090.8	1068.4	1014.4	917.0	899.9	750.5
17.5°	978.9	982.2	992.0	1019.7	1063.8	1121.7	1132.9	1091.5	985.5	971.0	803.1
20°	1001.3	1004.6	1013.1	1036.8	1070.4	1129.0	1175.7	1165.8	1057.9	1042.7	856.4
22.5°	1054.6	1056.6	1056.6	1075.0	1104.6	1148.1	1202.7	1236.3	1132.3	1115.8	909.1
25°	1169.1	1165.2	1149.4	1140.2	1159.3	1194.8	1236.9	1298.2	1215.2	1192.8	965.7
27.5°	1319.2	1332.4	1294.2	1250.1	1235.6	1256.0	1285.0	1352.8	1295.5	1271.8	1017.1
30°	1522.6	1517.4	1467.3	1404.1	1341.6	1334.4	1344.2	1399.5	1375.8	1353.5	1074.3
32.5°	1689.8	1699.7	1647.1	1570.0	1476.6	1432.4	1421.9	1455.5	1461.4	1446.9	1142.1
35°	1861.7	1872.2	1820.8	1735.3	1624.0	1550.3	1520.0	1524.6	1567.4	1549.0	1213.2
37.5°	2015.7	2024.9	1974.2	1886.7	1775.4	1685.2	1641.8	1606.2	1670.1	1653.6	1288.3
40°	2132.9	2134.2	2100.0	2021.6	1916.3	1822.8	1773.4	1703.7	1778.7	1767.5	1366.6
42.5°	2215.8	2218.5	2193.4	2126.3	2028.9	1942.0	1901.8	1818.9	1903.8	1893.9	1457.5
45°	2254.7	2259.3	2256.6	2194.8	2113.8	2038.7	2025.6	1941.3	2040.7	2031.5	1562.1
47.5°	2217.8	2217.8	2251.4	2242.8	2168.4	2118.4	2133.5	2069.0	2189.5	2180.9	1668.8
50°	2064.4	2066.4	2134.8	2232.9	2189.5	2178.3	2225.7	2194.1	2324.4	2329.7	1796.5
52.5°	1661.5	1658.2	1889.3	2077.6	2175.0	2205.3	2310.6	2321.8	2486.4	2502.2	1923.5
55°	1241.5	1239.6	1460.8	1802.4	2073.6	2191.5	2358.0	2435.7	2624.6	2634.5	2018.3
57.5°	982.8	977.6	1099.4	1452.9	1844.5	2129.6	2360.0	2457.4	2701.6	2718.8	2110.5
60°	755.7	751.1	842.0	1080.9	1520.0	1965.0	2303.4	2458.7	2776.0	2806.3	2234.2
62.5°	540.5	545.7	615.5	775.5	1169.1	1732.6	2229.6	2477.2	2908.3	2942.6	2410.0
65°	364.7	362.1	420.0	528.0	831.4	1419.9	2116.4	2516.0	3146.6	3206.5	2620.7
67.5°	253.4	255.4	281.7	343.6	528.0	1090.1	1928.1	2537.7	3392.8	3439.6	2768.1
70°	183.0	185.6	200.1	231.1	322.6	739.3	1629.9	2438.3	3459.3	3500.1	2665.4
72.5°	120.5	125.7	147.5	163.9	206.0	462.8	1200.7	2100.6	3173.0	3203.3	2236.2
75°	65.2	66.5	94.8	122.4	146.8	288.3	716.2	1416.6	2373.8	2363.9	1474.6
77.5°	50.7	52.7	58.6	87.6	98.7	158.6	283.1	639.9	1124.4	1094.1	502.9
80°	30.9	32.3	40.8	52.0	69.1	92.2	82.9	173.8	228.4	213.9	73.7
82.5°	18.4	19.7	24.4	43.4	54.6	43.4	29.0	42.1	42.8	42.1	18.4
85°	3.3	3.3	17.1	30.3	29.0	12.5	17.1	13.8	12.5	13.2	3.9
87.5°	0.0	0.0	6.6	9.2	13.2	4.6	6.6	3.3	3.3	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397752

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3
2.5°	533.9	511.5	465.4	425.3	385.1	355.5	333.1	310.1	302.2	292.3	287.0
5°	543.1	499.0	407.5	334.4	272.5	225.1	194.9	176.4	164.6	156.0	154.0
7.5°	556.9	489.1	360.7	262.0	194.2	146.8	121.8	109.3	102.7	98.7	97.4
10°	573.4	480.6	314.7	204.1	136.9	103.4	89.5	84.3	81.6	80.3	79.7
12.5°	596.4	477.3	275.8	157.3	103.4	84.9	77.7	74.4	72.4	70.4	69.8
15°	626.7	478.6	240.3	121.8	85.6	75.7	69.8	66.5	63.9	61.9	61.9
17.5°	658.3	480.6	205.4	98.7	77.7	69.1	62.5	57.9	56.0	54.0	53.3
20°	687.9	479.9	171.8	84.3	70.4	61.9	55.3	50.7	47.4	45.4	45.4
22.5°	716.2	475.9	140.2	75.7	64.5	54.6	47.4	42.8	40.2	38.2	38.2
25°	746.5	468.0	114.5	69.1	57.3	48.1	40.8	36.2	34.2	32.3	32.3
27.5°	770.2	454.9	93.5	63.2	50.7	41.5	34.9	30.9	29.0	27.6	27.6
30°	795.9	435.8	77.7	56.6	44.1	35.5	29.6	26.3	24.4	23.7	23.7
32.5°	824.2	414.7	66.5	50.0	37.5	30.3	25.0	23.0	21.1	20.4	20.4
35°	857.1	396.3	59.9	43.4	32.9	25.7	21.7	19.7	18.4	18.4	18.4
37.5°	894.6	377.2	54.0	38.2	28.3	21.7	18.4	17.8	17.1	16.5	16.5
40°	935.4	356.8	48.7	33.6	24.4	18.4	15.8	15.8	15.1	15.1	15.1
42.5°	981.5	339.0	44.1	29.6	21.1	15.8	13.8	13.8	13.2	13.2	13.2
45°	1031.5	322.6	40.2	26.3	18.4	13.8	12.5	11.8	11.2	11.2	11.2
47.5°	1090.8	313.3	36.9	23.0	15.8	11.8	10.5	9.9	9.2	8.6	8.6
50°	1166.5	317.3	33.6	19.1	13.8	9.9	8.6	7.9	7.2	6.6	6.6
52.5°	1226.4	315.3	29.0	16.5	11.2	7.9	6.6	5.9	5.3	4.6	4.6
55°	1269.8	307.4	25.0	13.8	8.6	6.6	5.3	3.9	3.3	3.3	3.3
57.5°	1312.6	299.5	21.1	11.2	6.6	4.6	3.3	2.6	2.6	2.6	2.6
60°	1379.1	288.3	18.4	9.2	5.3	3.3	2.0	2.0	1.3	1.3	1.3
62.5°	1460.1	274.5	15.1	7.9	3.9	2.6	1.3	1.3	0.0	0.0	0.0
65°	1549.0	250.2	12.5	5.9	3.3	2.0	1.3	0.0	0.0	0.0	0.0
67.5°	1528.6	200.8	10.5	3.9	2.6	1.3	0.7	0.0	0.0	0.0	0.0
70°	1352.1	135.6	8.6	3.3	2.0	1.3	0.7	0.0	0.0	0.0	0.0
72.5°	1059.2	80.3	5.9	2.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0
75°	678.0	40.2	3.9	2.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	227.1	19.7	2.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	32.3	6.6	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.2	2.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.6	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	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)