

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: P799686

Luminaire Tested: **ARCH2-40-750-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-40-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 335mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4699 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 44.1
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: 24 FT



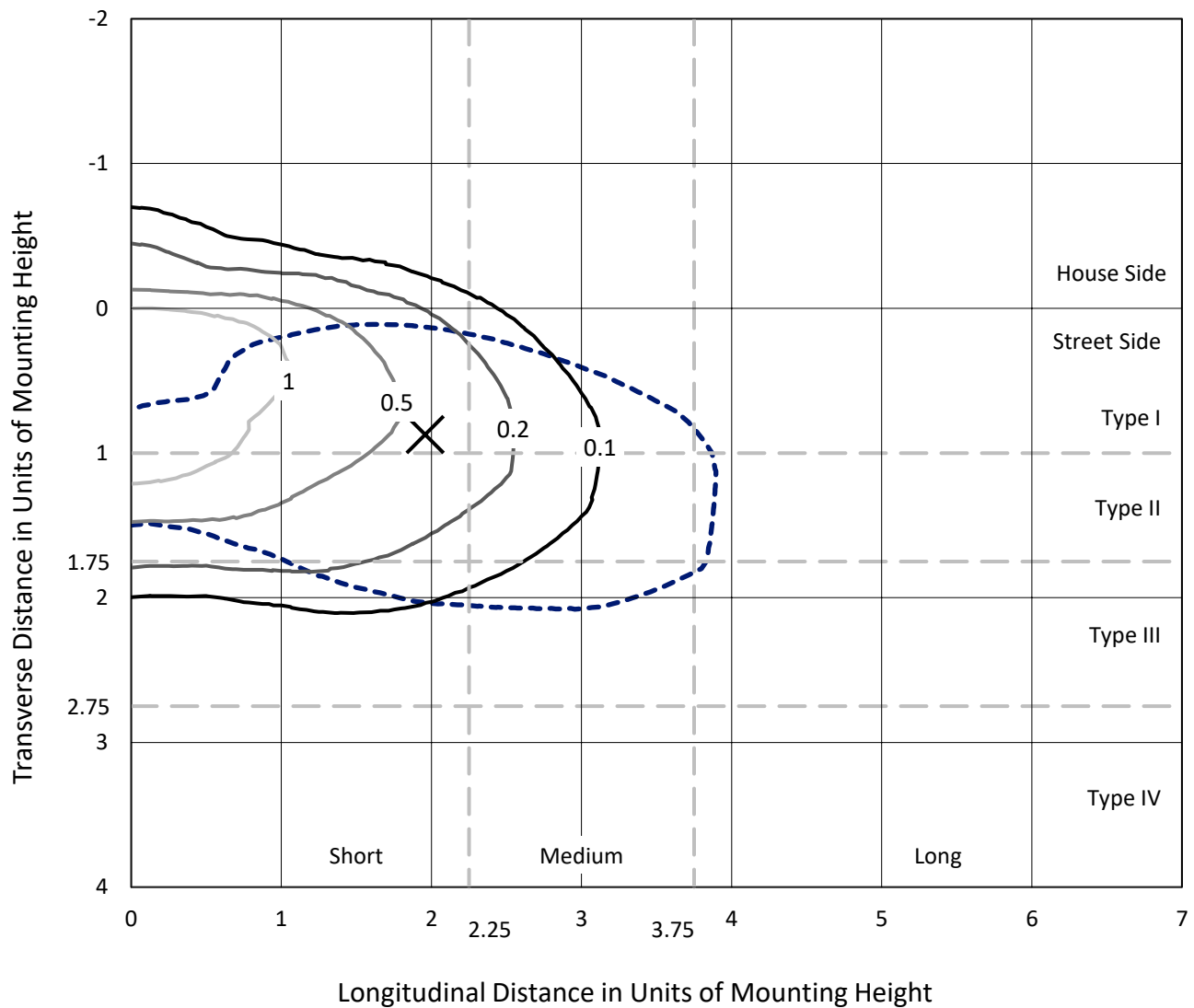
REPORT NUMBER: P799686

CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

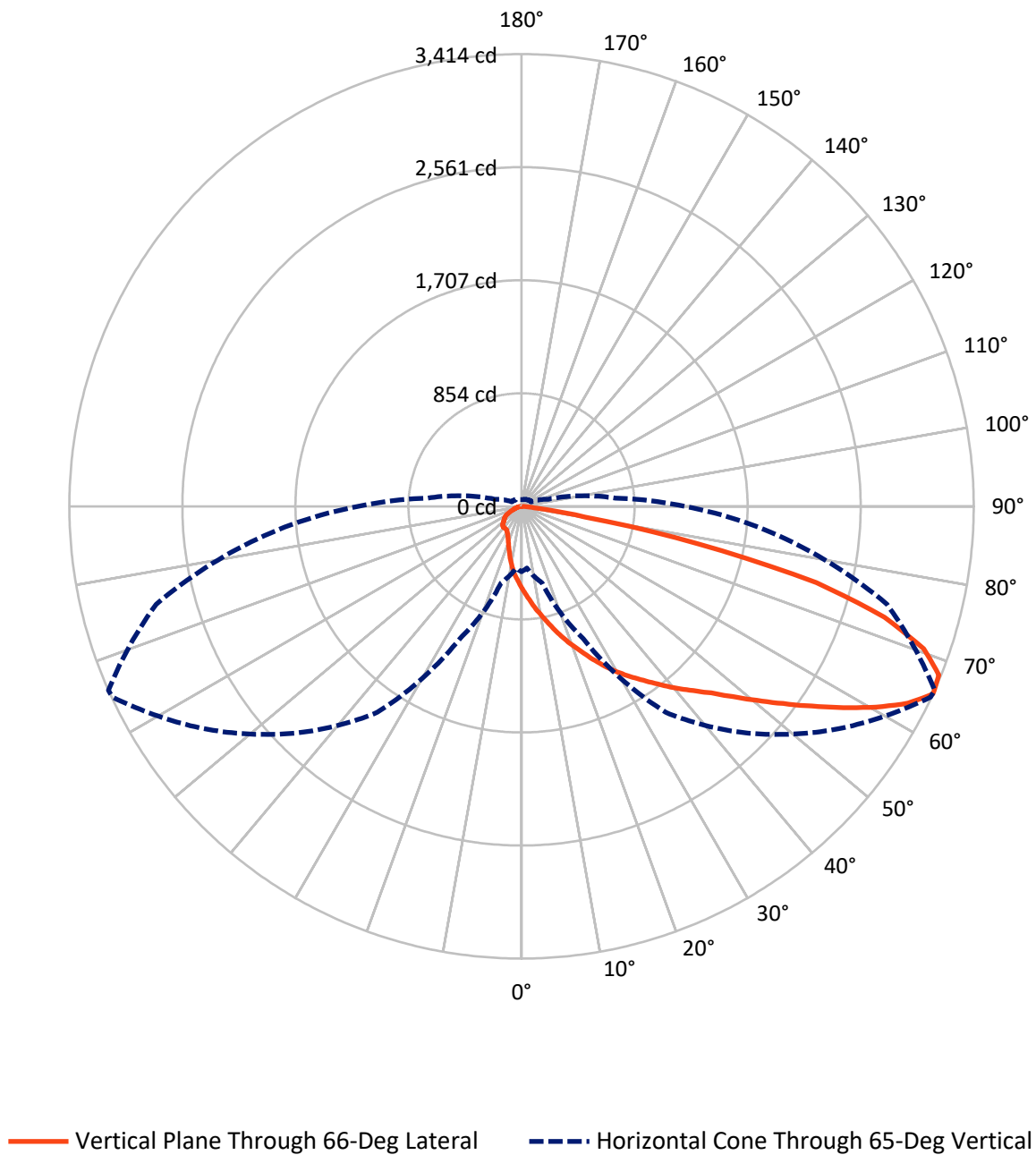


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type III - Short - N/A

REPORT NUMBER: P799686

CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P799686

CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

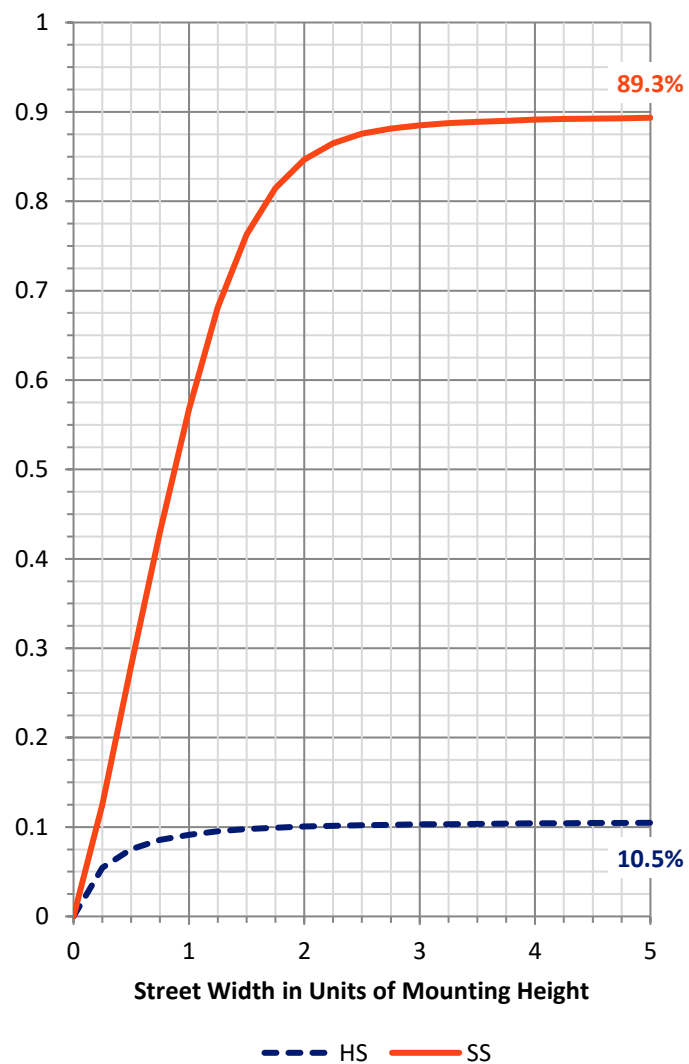
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	497.0	0.0	497.0
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4202.0	0.0	4202.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	4699.0	0.0	4699.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	1.3
10°-20°	200.1	4.3
20°-30°	362.0	7.7
30°-40°	566.0	12.0
40°-50°	858.6	18.3
50°-60°	1090.9	23.2
60°-70°	1019.4	21.7
70°-80°	506.6	10.8
80°-90°	34.0	0.7
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°	4699.0	100.0
0°-180°	4699.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799686

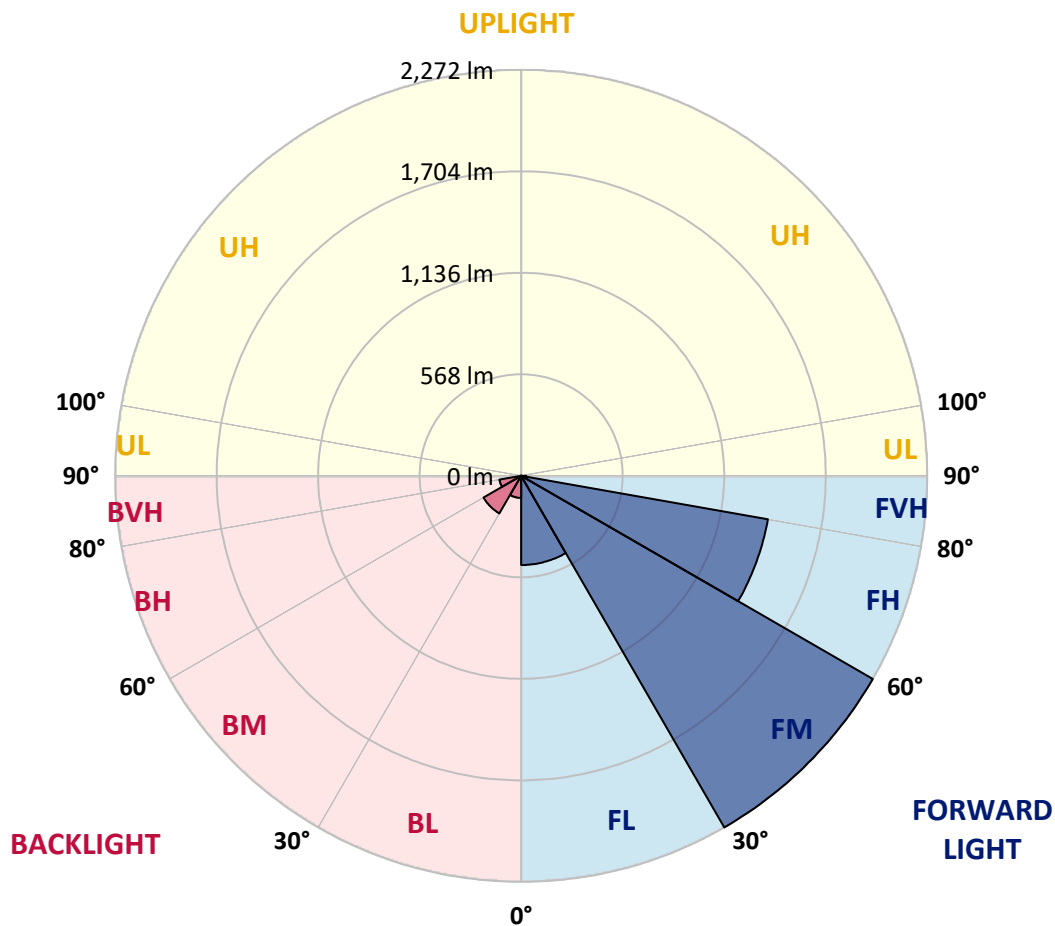
CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	499.3	10.6			
FM	(30°-60°)	2272.5	48.4			
FH	(60°-80°)	1402.2	29.8			G1/1800
FVH	(80°-90°)	28.0	0.6			G1/100
BL	(0°-30°)	124.1	2.6	B1/500		
BM	(30°-60°)	243.1	5.2	B1/1000		
BH	(60°-80°)	123.8	2.6	B1/500		G1/500
BVH	(80°-90°)	6.0	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



REPORT NUMBER: P799686

CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9
2.5°	726.4	732.3	735.2	736.2	713.5	703.7	693.8	671.2	666.2	653.4	636.7
5°	854.5	862.4	860.4	856.4	828.9	797.3	771.7	729.3	722.4	691.9	654.4
7.5°	980.6	987.5	985.6	970.8	940.2	895.9	853.5	791.4	781.5	732.3	672.2
10°	1086.1	1092.0	1091.0	1076.2	1039.8	985.6	934.3	851.5	839.7	769.7	686.9
12.5°	1172.8	1180.7	1179.7	1169.9	1137.3	1078.2	1020.1	920.5	905.7	815.1	707.6
15°	1240.8	1250.7	1250.7	1246.7	1224.1	1174.8	1108.8	996.4	978.7	867.3	733.3
17.5°	1282.2	1290.1	1297.0	1303.9	1288.1	1250.7	1190.6	1072.3	1053.6	918.5	759.9
20°	1303.9	1311.8	1316.7	1331.5	1334.4	1315.7	1268.4	1147.2	1127.5	976.7	790.4
22.5°	1339.4	1346.3	1347.3	1360.1	1366.0	1370.9	1341.3	1221.1	1205.3	1040.7	824.9
25°	1398.5	1406.4	1403.4	1409.3	1410.3	1416.2	1413.3	1305.9	1290.1	1113.7	866.3
27.5°	1474.4	1484.2	1482.3	1476.4	1467.5	1462.6	1475.4	1391.6	1376.8	1186.6	908.7
30°	1556.2	1568.0	1565.1	1553.2	1529.6	1508.9	1526.6	1472.4	1458.6	1261.5	956.0
32.5°	1639.0	1652.8	1651.8	1632.1	1591.7	1556.2	1582.8	1548.3	1538.5	1342.3	1007.2
35°	1693.2	1710.9	1709.0	1697.1	1644.9	1614.3	1646.9	1626.2	1619.3	1440.9	1081.2
37.5°	1780.9	1799.6	1782.9	1753.3	1693.2	1677.4	1716.8	1713.9	1709.0	1545.4	1159.0
40°	1993.8	2021.4	1977.0	1855.8	1757.2	1743.5	1799.6	1811.5	1806.5	1648.8	1229.0
42.5°	2216.5	2257.9	2188.9	2021.4	1873.5	1823.3	1890.3	1907.1	1901.1	1737.5	1292.1
45°	2351.5	2369.3	2300.3	2170.2	2079.5	1919.9	1986.9	2014.5	2009.6	1844.0	1372.9
47.5°	2461.9	2455.0	2376.2	2288.5	2305.2	2055.9	2096.3	2150.5	2146.5	1961.3	1461.6
50°	2485.6	2469.8	2438.3	2383.1	2427.4	2193.9	2211.6	2305.2	2301.3	2091.4	1551.3
52.5°	2319.0	2298.3	2384.1	2430.4	2415.6	2294.4	2338.7	2474.7	2472.8	2232.3	1637.0
55°	1903.1	1886.4	2117.0	2356.5	2402.8	2365.3	2479.7	2651.2	2662.0	2382.1	1714.9
57.5°	1497.1	1479.3	1706.0	2171.2	2355.5	2430.4	2644.3	2853.2	2867.0	2544.7	1788.8
60°	1193.5	1166.9	1340.4	1879.5	2266.8	2480.6	2802.9	3074.9	3076.9	2693.5	1834.1
62.5°	811.1	781.5	973.7	1509.9	2118.0	2488.5	2925.1	3266.1	3274.0	2804.9	1842.0
65°	492.8	468.1	598.2	1102.8	1898.2	2421.5	2927.1	3407.1	3414.0	2856.1	1794.7
67.5°	285.8	276.0	342.0	686.9	1533.5	2241.2	2803.9	3385.4	3398.2	2834.5	1687.3
70°	166.6	165.6	190.2	340.0	1082.1	1883.4	2528.9	3203.1	3221.8	2721.1	1522.7
72.5°	122.2	124.2	134.0	182.3	626.8	1356.1	2141.6	2836.4	2865.0	2499.4	1288.1
75°	96.6	97.6	106.4	124.2	329.2	766.8	1604.5	2276.6	2299.3	2104.2	1006.3
77.5°	71.9	73.9	80.8	87.7	152.8	351.8	902.8	1402.4	1365.0	1155.1	485.9
80°	52.2	57.2	60.1	63.1	80.8	136.0	271.0	488.8	484.9	504.6	229.6
82.5°	33.5	37.5	40.4	42.4	48.3	65.0	80.8	109.4	118.3	196.1	91.7
85°	14.8	16.8	18.7	22.7	20.7	22.7	33.5	21.7	18.7	29.6	16.8
87.5°	0.0	0.0	3.0	4.9	3.9	2.0	5.9	3.9	3.0	3.0	3.0
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: P799686

CATALOG NUMBER: ARCH2-40-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9
2.5°	627.8	617.0	594.3	572.6	559.8	543.0	528.3	514.5	513.5	509.5	502.6
5°	635.7	615.0	572.6	532.2	501.6	469.1	441.5	419.8	412.0	406.0	398.2
7.5°	643.6	611.0	548.0	488.8	440.5	395.2	362.7	333.1	324.2	316.4	311.4
10°	646.5	604.1	519.4	440.5	377.5	329.2	294.7	273.0	265.1	261.2	258.2
12.5°	655.4	600.2	492.8	395.2	322.3	277.9	253.3	240.5	237.5	234.6	231.6
15°	667.2	600.2	466.2	350.9	278.9	243.4	228.6	219.8	217.8	216.8	214.9
17.5°	680.0	600.2	440.5	313.4	247.4	220.8	209.9	205.0	204.0	203.0	202.0
20°	697.8	601.2	412.9	280.9	224.7	204.0	195.1	189.2	188.2	187.3	187.3
22.5°	715.5	603.2	386.3	256.2	209.9	191.2	180.4	174.4	172.5	172.5	172.5
25°	738.2	609.1	361.7	235.5	197.1	179.4	165.6	160.6	159.7	159.7	158.7
27.5°	764.8	616.0	340.0	219.8	184.3	165.6	151.8	146.8	144.9	144.9	143.9
30°	793.4	622.9	322.3	208.0	171.5	151.8	139.0	133.1	131.1	132.1	131.1
32.5°	824.9	632.7	308.5	200.1	159.7	139.9	128.1	121.2	120.2	120.2	119.3
35°	878.1	660.3	306.5	196.1	149.8	131.1	119.3	112.4	111.4	111.4	110.4
37.5°	935.3	691.9	315.4	194.2	141.9	123.2	112.4	105.5	104.5	104.5	104.5
40°	983.6	715.5	325.2	194.2	137.0	116.3	106.4	100.5	100.5	100.5	100.5
42.5°	1016.1	717.5	323.3	194.2	133.1	111.4	102.5	96.6	96.6	97.6	96.6
45°	1064.4	727.3	315.4	191.2	130.1	107.4	98.6	93.6	92.6	93.6	93.6
47.5°	1121.6	745.1	307.5	179.4	129.1	103.5	95.6	89.7	88.7	89.7	88.7
50°	1175.8	760.9	303.6	163.6	127.1	99.5	91.7	85.7	84.8	85.7	84.8
52.5°	1221.1	767.7	296.7	152.8	122.2	95.6	87.7	81.8	79.8	80.8	80.8
55°	1257.6	765.8	286.8	143.9	113.3	91.7	82.8	77.9	74.9	74.9	73.9
57.5°	1291.1	766.8	277.9	135.0	103.5	85.7	78.8	72.9	69.0	68.0	67.0
60°	1303.9	761.8	262.2	123.2	93.6	80.8	73.9	67.0	63.1	62.1	61.1
62.5°	1286.2	744.1	241.5	102.5	84.8	74.9	69.0	62.1	58.1	57.2	56.2
65°	1235.9	710.6	209.9	80.8	76.9	68.0	63.1	58.1	53.2	51.2	50.3
67.5°	1150.1	662.3	170.5	65.0	68.0	62.1	59.1	53.2	47.3	45.3	44.4
70°	1027.9	598.2	128.1	55.2	60.1	55.2	53.2	47.3	42.4	40.4	39.4
72.5°	856.4	494.7	89.7	47.3	52.2	48.3	46.3	42.4	37.5	34.5	34.5
75°	647.5	354.8	59.1	40.4	43.4	41.4	38.4	35.5	32.5	30.6	29.6
77.5°	278.9	138.0	36.5	30.6	35.5	34.5	30.6	28.6	27.6	25.6	25.6
80°	120.2	56.2	22.7	22.7	25.6	24.6	23.7	21.7	21.7	20.7	19.7
82.5°	44.4	22.7	13.8	16.8	18.7	16.8	16.8	16.8	16.8	15.8	15.8
85°	10.8	6.9	6.9	9.9	10.8	9.9	10.8	9.9	9.9	9.9	8.9
87.5°	3.0	3.0	3.9	3.9	3.9	3.9	3.9	3.0	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)