

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: P799046

Luminaire Tested: **ARCH1-50-750-U-T3-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799046
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: ARCH1-50-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4768 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 53
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

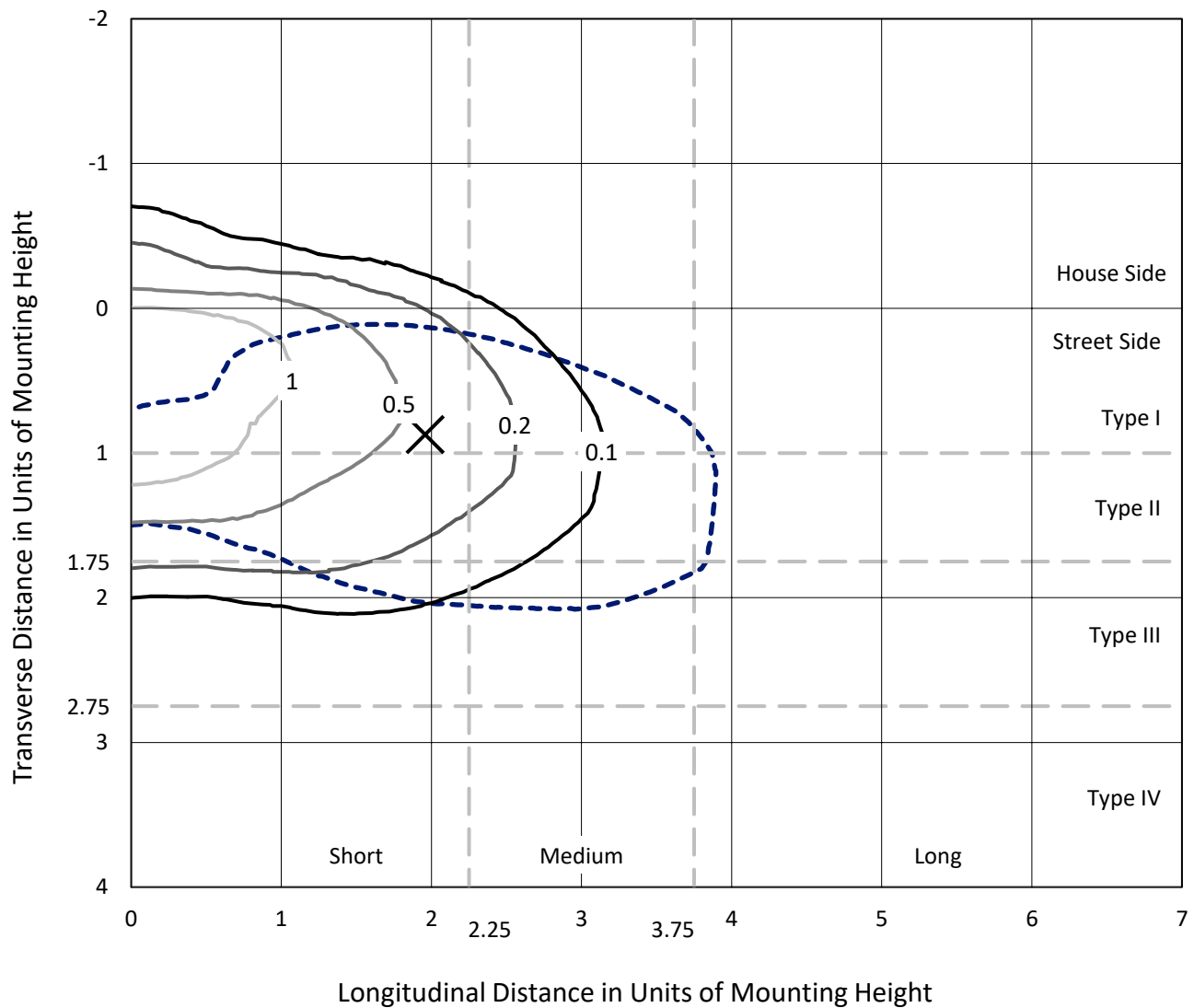


REPORT NUMBER: P799046

CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd

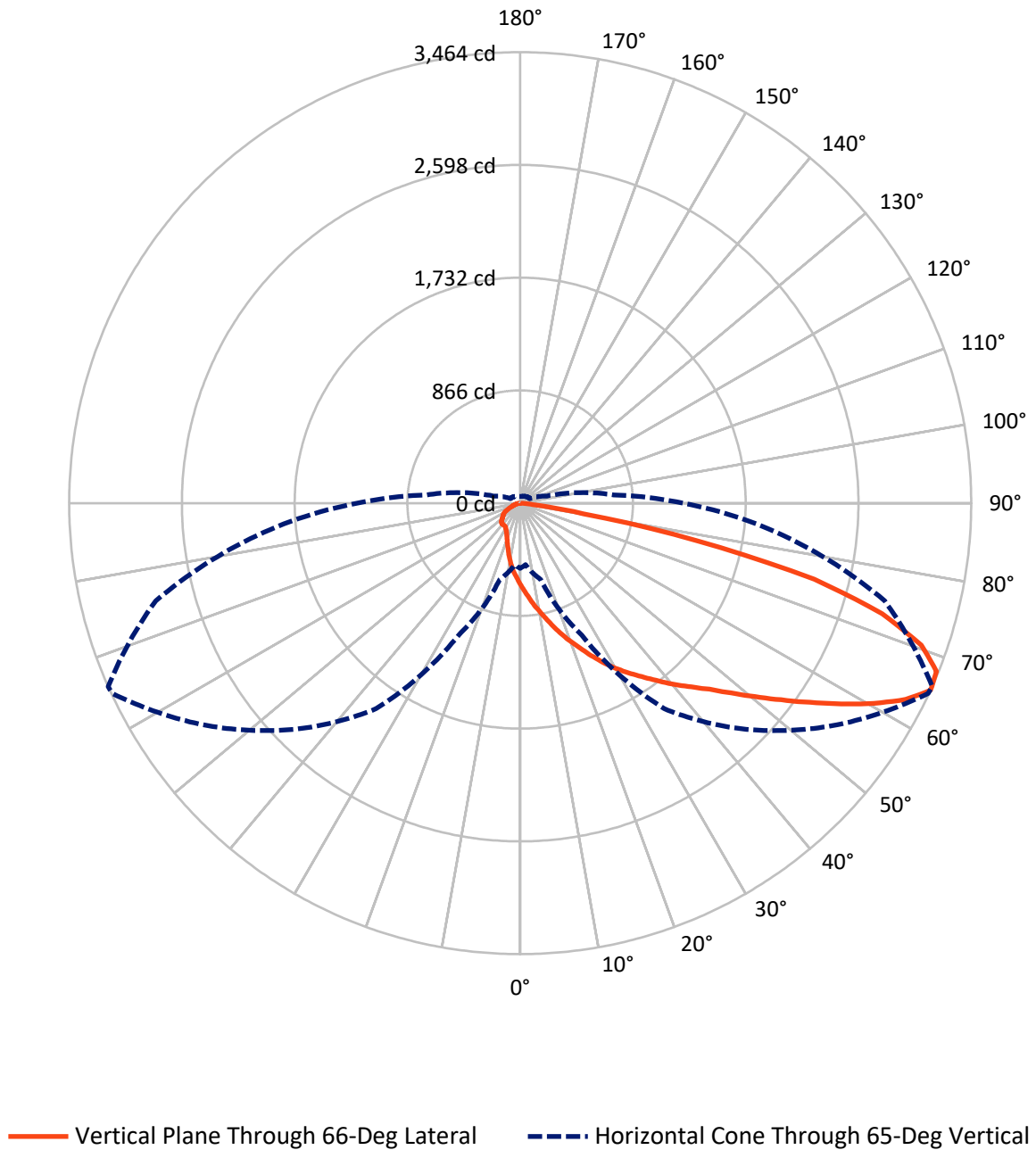


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type III - Short - N/A

REPORT NUMBER: P799046

CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P799046

CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

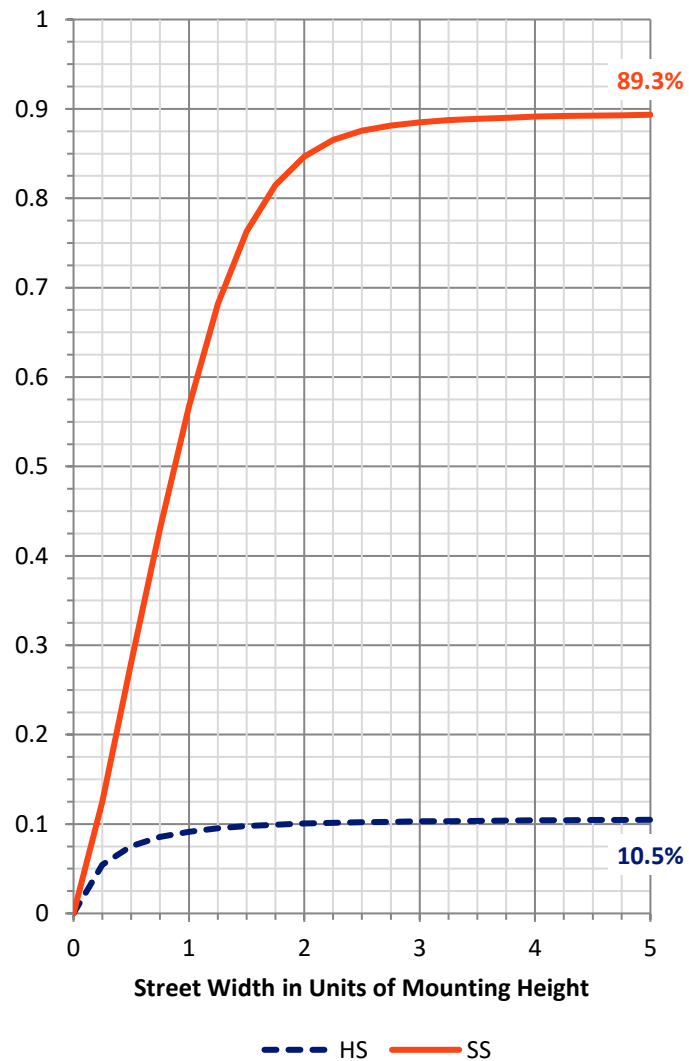
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	504.3	0.0	504.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4263.7	0.0	4263.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	4768.0	0.0	4768.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	1.3
10°-20°	203.0	4.3
20°-30°	367.3	7.7
30°-40°	574.3	12.0
40°-50°	871.3	18.3
50°-60°	1107.0	23.2
60°-70°	1034.3	21.7
70°-80°	514.0	10.8
80°-90°	34.5	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°	4768.0	100.0
0°-180°	4768.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799046

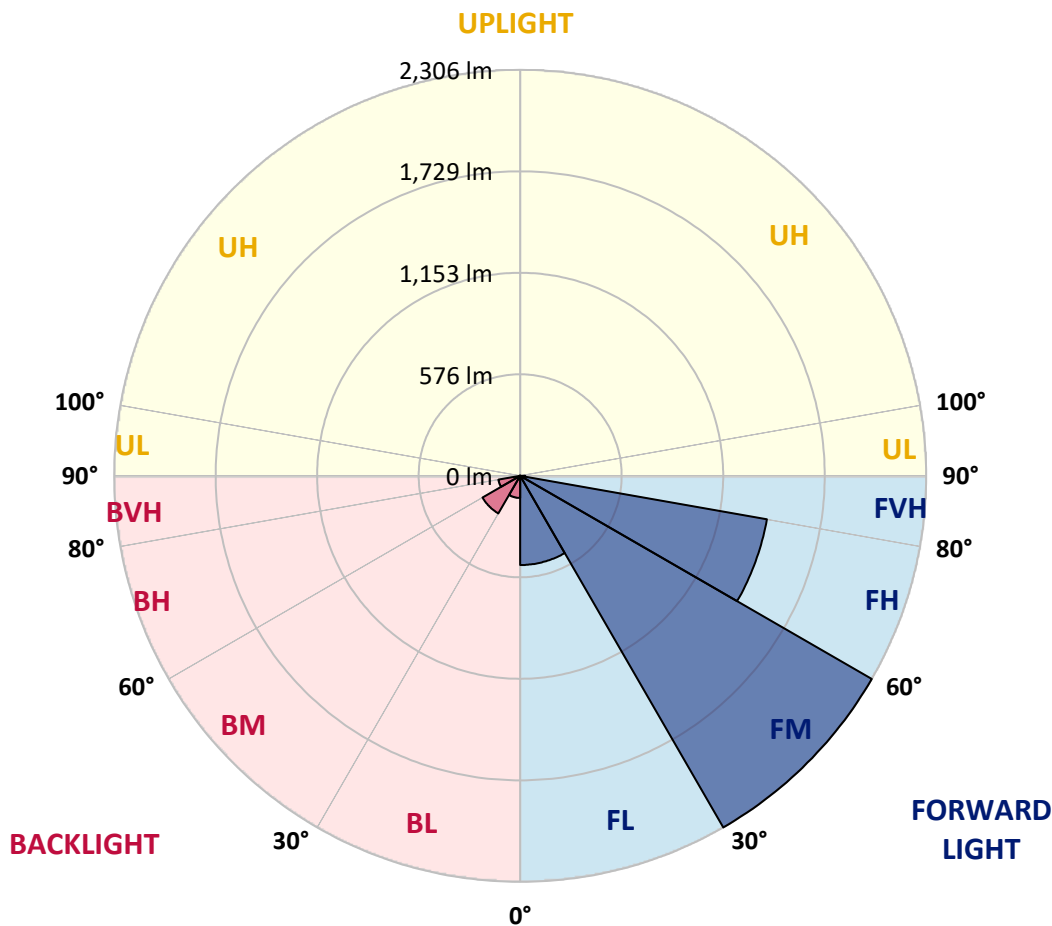
CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	506.6	10.6			
FM	(30°-60°)	2305.9	48.4			
FH	(60°-80°)	1422.8	29.8			G1/1800
FVH	(80°-90°)	28.4	0.6			G1/100
BL	(0°-30°)	125.9	2.6	B1/500		
BM	(30°-60°)	246.7	5.2	B1/1000		
BH	(60°-80°)	125.6	2.6	B1/500		G1/500
BVH	(80°-90°)	6.1	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: P799046

CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0
2.5°	737.0	743.0	746.0	747.0	724.0	714.0	704.0	681.0	676.0	663.0	646.0
5°	867.0	875.0	873.0	869.0	841.0	809.0	783.0	740.0	733.0	702.0	664.0
7.5°	995.0	1002.0	1000.0	985.0	954.0	909.0	866.0	803.0	793.0	743.0	682.0
10°	1102.0	1108.0	1107.0	1092.0	1055.0	1000.0	948.0	864.0	852.0	781.0	697.0
12.5°	1190.0	1198.0	1197.0	1187.0	1154.0	1094.0	1035.0	934.0	919.0	827.0	718.0
15°	1259.0	1269.0	1269.0	1265.0	1242.0	1192.0	1125.0	1011.0	993.0	880.0	744.0
17.5°	1301.0	1309.0	1316.0	1323.0	1307.0	1269.0	1208.0	1088.0	1069.0	932.0	771.0
20°	1323.0	1331.0	1336.0	1351.0	1354.0	1335.0	1287.0	1164.0	1144.0	991.0	802.0
22.5°	1359.0	1366.0	1367.0	1380.0	1386.0	1391.0	1361.0	1239.0	1223.0	1056.0	837.0
25°	1419.0	1427.0	1424.0	1430.0	1431.0	1437.0	1434.0	1325.0	1309.0	1130.0	879.0
27.5°	1496.0	1506.0	1504.0	1498.0	1489.0	1484.0	1497.0	1412.0	1397.0	1204.0	922.0
30°	1579.0	1591.0	1588.0	1576.0	1552.0	1531.0	1549.0	1494.0	1480.0	1280.0	970.0
32.5°	1663.0	1677.0	1676.0	1656.0	1615.0	1579.0	1606.0	1571.0	1561.0	1362.0	1022.0
35°	1718.1	1736.1	1734.1	1722.1	1669.0	1638.0	1671.0	1650.0	1643.0	1462.0	1097.0
37.5°	1807.1	1826.1	1809.1	1779.1	1718.1	1702.1	1742.1	1739.1	1734.1	1568.0	1176.0
40°	2023.1	2051.1	2006.1	1883.1	1783.1	1769.1	1826.1	1838.1	1833.1	1673.0	1247.0
42.5°	2249.1	2291.1	2221.1	2051.1	1901.1	1850.1	1918.1	1935.1	1929.1	1763.1	1311.0
45°	2386.1	2404.1	2334.1	2202.1	2110.1	1948.1	2016.1	2044.1	2039.1	1871.1	1393.0
47.5°	2498.1	2491.1	2411.1	2322.1	2339.1	2086.1	2127.1	2182.1	2178.1	1990.1	1483.0
50°	2522.1	2506.1	2474.1	2418.1	2463.1	2226.1	2244.1	2339.1	2335.1	2122.1	1574.0
52.5°	2353.1	2332.1	2419.1	2466.1	2451.1	2328.1	2373.1	2511.1	2509.1	2265.1	1661.0
55°	1931.1	1914.1	2148.1	2391.1	2438.1	2400.1	2516.1	2690.1	2701.1	2417.1	1740.1
57.5°	1519.0	1501.0	1731.1	2203.1	2390.1	2466.1	2683.1	2895.1	2909.1	2582.1	1815.1
60°	1211.0	1184.0	1360.0	1907.1	2300.1	2517.1	2844.1	3120.1	3122.1	2733.1	1861.1
62.5°	823.0	793.0	988.0	1532.0	2149.1	2525.1	2968.1	3314.1	3322.1	2846.1	1869.1
65°	500.0	475.0	607.0	1119.0	1926.1	2457.1	2970.1	3457.1	3464.1	2898.1	1821.1
67.5°	290.0	280.0	347.0	697.0	1556.0	2274.1	2845.1	3435.1	3448.1	2876.1	1712.1
70°	169.0	168.0	193.0	345.0	1098.0	1911.1	2566.1	3250.1	3269.1	2761.1	1545.0
72.5°	124.0	126.0	136.0	185.0	636.0	1376.0	2173.1	2878.1	2907.1	2536.1	1307.0
75°	98.0	99.0	108.0	126.0	334.0	778.0	1628.0	2310.1	2333.1	2135.1	1021.0
77.5°	73.0	75.0	82.0	89.0	155.0	357.0	916.0	1423.0	1385.0	1172.0	493.0
80°	53.0	58.0	61.0	64.0	82.0	138.0	275.0	496.0	492.0	512.0	233.0
82.5°	34.0	38.0	41.0	43.0	49.0	66.0	82.0	111.0	120.0	199.0	93.0
85°	15.0	17.0	19.0	23.0	21.0	23.0	34.0	22.0	19.0	30.0	17.0
87.5°	0.0	0.0	3.0	5.0	4.0	2.0	6.0	4.0	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: P799046

CATALOG NUMBER: ARCH1-50-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0
2.5°	637.0	626.0	603.0	581.0	568.0	551.0	536.0	522.0	521.0	517.0	510.0
5°	645.0	624.0	581.0	540.0	509.0	476.0	448.0	426.0	418.0	412.0	404.0
7.5°	653.0	620.0	556.0	496.0	447.0	401.0	368.0	338.0	329.0	321.0	316.0
10°	656.0	613.0	527.0	447.0	383.0	334.0	299.0	277.0	269.0	265.0	262.0
12.5°	665.0	609.0	500.0	401.0	327.0	282.0	257.0	244.0	241.0	238.0	235.0
15°	677.0	609.0	473.0	356.0	283.0	247.0	232.0	223.0	221.0	220.0	218.0
17.5°	690.0	609.0	447.0	318.0	251.0	224.0	213.0	208.0	207.0	206.0	205.0
20°	708.0	610.0	419.0	285.0	228.0	207.0	198.0	192.0	191.0	190.0	190.0
22.5°	726.0	612.0	392.0	260.0	213.0	194.0	183.0	177.0	175.0	175.0	175.0
25°	749.0	618.0	367.0	239.0	200.0	182.0	168.0	163.0	162.0	162.0	161.0
27.5°	776.0	625.0	345.0	223.0	187.0	168.0	154.0	149.0	147.0	147.0	146.0
30°	805.0	632.0	327.0	211.0	174.0	154.0	141.0	135.0	133.0	134.0	133.0
32.5°	837.0	642.0	313.0	203.0	162.0	142.0	130.0	123.0	122.0	122.0	121.0
35°	891.0	670.0	311.0	199.0	152.0	133.0	121.0	114.0	113.0	113.0	112.0
37.5°	949.0	702.0	320.0	197.0	144.0	125.0	114.0	107.0	106.0	106.0	106.0
40°	998.0	726.0	330.0	197.0	139.0	118.0	108.0	102.0	102.0	102.0	102.0
42.5°	1031.0	728.0	328.0	197.0	135.0	113.0	104.0	98.0	98.0	99.0	98.0
45°	1080.0	738.0	320.0	194.0	132.0	109.0	100.0	95.0	94.0	95.0	95.0
47.5°	1138.0	756.0	312.0	182.0	131.0	105.0	97.0	91.0	90.0	91.0	90.0
50°	1193.0	772.0	308.0	166.0	129.0	101.0	93.0	87.0	86.0	87.0	86.0
52.5°	1239.0	779.0	301.0	155.0	124.0	97.0	89.0	83.0	81.0	82.0	82.0
55°	1276.0	777.0	291.0	146.0	115.0	93.0	84.0	79.0	76.0	76.0	75.0
57.5°	1310.0	778.0	282.0	137.0	105.0	87.0	80.0	74.0	70.0	69.0	68.0
60°	1323.0	773.0	266.0	125.0	95.0	82.0	75.0	68.0	64.0	63.0	62.0
62.5°	1305.0	755.0	245.0	104.0	86.0	76.0	70.0	63.0	59.0	58.0	57.0
65°	1254.0	721.0	213.0	82.0	78.0	69.0	64.0	59.0	54.0	52.0	51.0
67.5°	1167.0	672.0	173.0	66.0	69.0	63.0	60.0	54.0	48.0	46.0	45.0
70°	1043.0	607.0	130.0	56.0	61.0	56.0	54.0	48.0	43.0	41.0	40.0
72.5°	869.0	502.0	91.0	48.0	53.0	49.0	47.0	43.0	38.0	35.0	35.0
75°	657.0	360.0	60.0	41.0	44.0	42.0	39.0	36.0	33.0	31.0	30.0
77.5°	283.0	140.0	37.0	31.0	36.0	35.0	31.0	29.0	28.0	26.0	26.0
80°	122.0	57.0	23.0	23.0	26.0	25.0	24.0	22.0	22.0	21.0	20.0
82.5°	45.0	23.0	14.0	17.0	19.0	17.0	17.0	17.0	17.0	16.0	16.0
85°	11.0	7.0	7.0	10.0	11.0	10.0	11.0	10.0	10.0	10.0	9.0
87.5°	3.0	3.0	4.0	4.0	4.0	4.0	4.0	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)