

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: P799044

Luminaire Tested: **ARCH1-50-750-U-T2U-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799044
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4589 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - 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

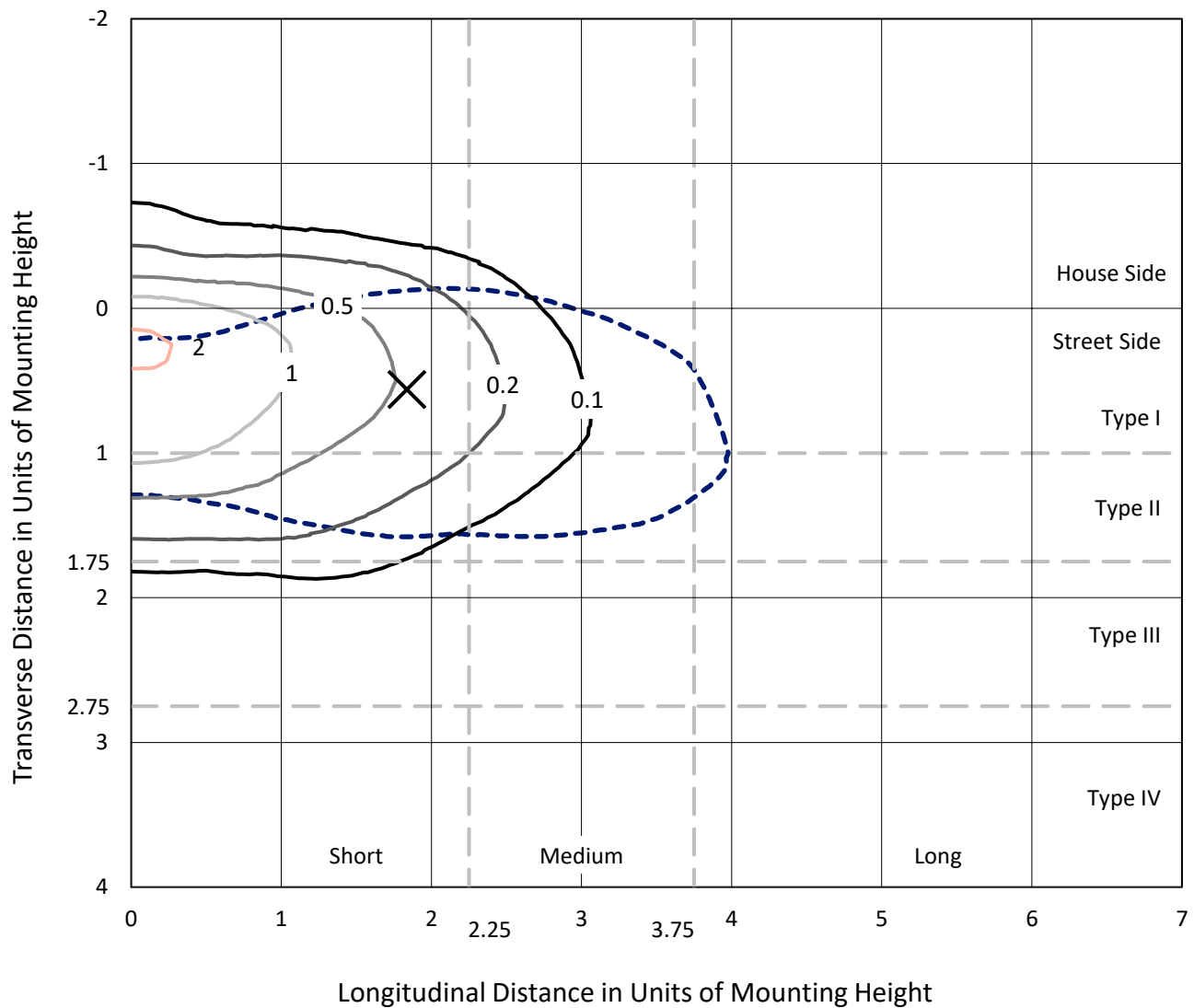


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Iso-Footcandle Lines of Horizontal Illumination

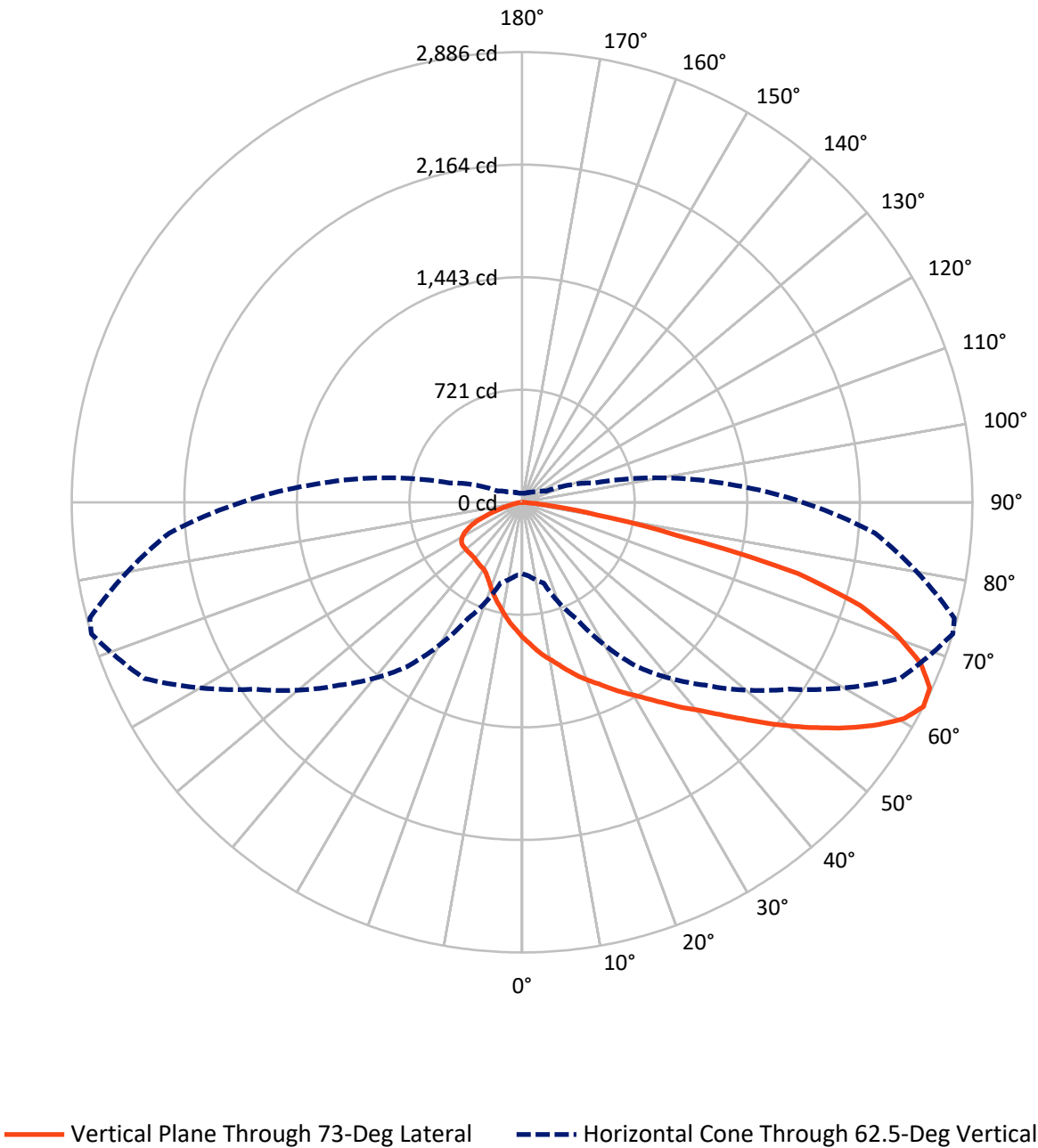
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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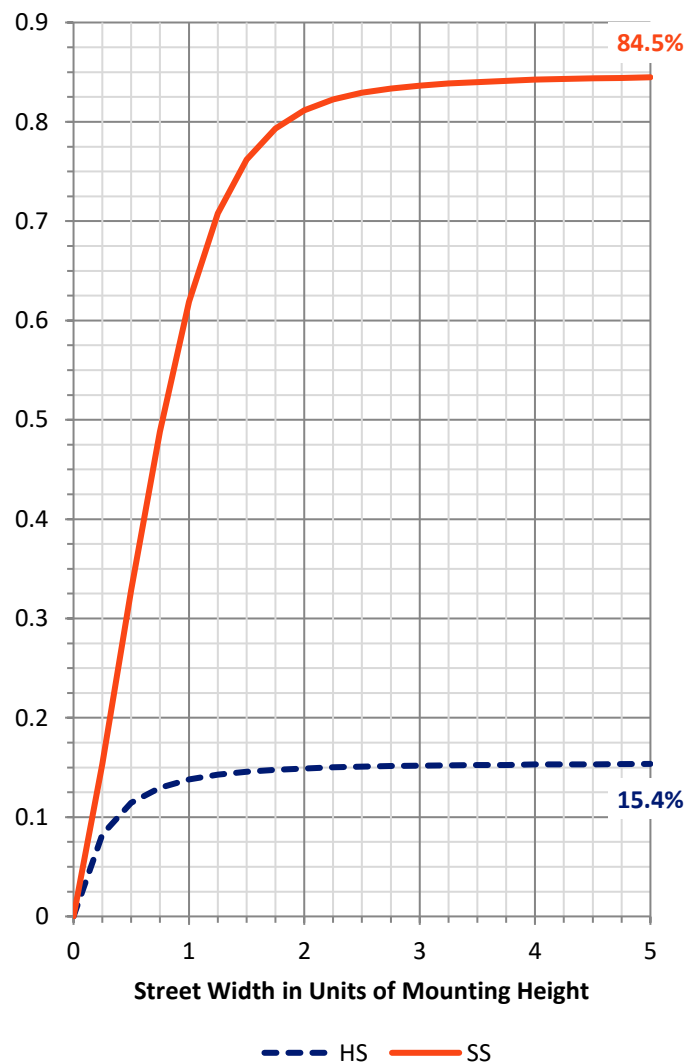
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	711.4	0.0	711.4
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	3877.6	0.0	3877.6
	% Fixture	84.5	0.0	84.5
Total	Lumens	4589.0	0.0	4589.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.9	1.8
10°-20°	253.3	5.5
20°-30°	421.6	9.2
30°-40°	636.2	13.9
40°-50°	889.2	19.4
50°-60°	982.2	21.4
60°-70°	855.6	18.6
70°-80°	432.2	9.4
80°-90°	34.7	0.8
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°	4589.0	100.0
0°-180°	4589.0	100.0

Coefficient of Utilization



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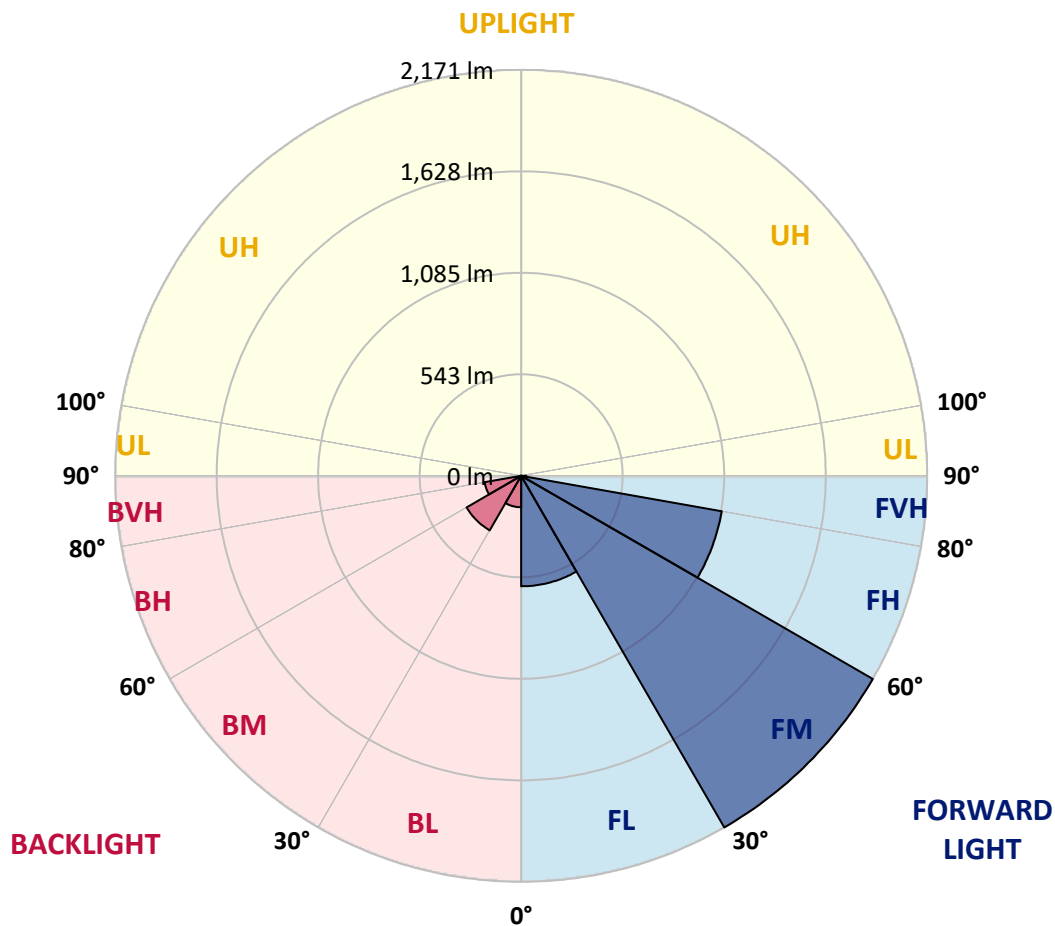
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	590.7	12.9			
FM	(30°-60°)	2170.8	47.3			
FH	(60°-80°)	1089.3	23.7			G1/1800
FVH	(80°-90°)	26.8	0.6			G1/100
BL	(0°-30°)	168.1	3.7	B1/500		
BM	(30°-60°)	336.8	7.3	B1/1000		
BH	(60°-80°)	198.6	4.3	B1/500		G1/500
BVH	(80°-90°)	7.8	0.2			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9
2.5°	988.9	999.9	993.9	997.9	977.9	964.9	949.9	920.9	904.9	902.9	883.9
5°	1133.9	1145.9	1135.9	1132.9	1097.9	1067.9	1033.9	982.9	948.9	942.9	900.9
7.5°	1278.9	1289.9	1277.9	1268.9	1221.9	1168.9	1118.9	1043.9	990.9	980.9	914.9
10°	1380.9	1390.9	1381.9	1372.9	1323.9	1269.9	1198.9	1100.9	1028.9	1012.9	923.9
12.5°	1457.9	1463.9	1459.9	1451.9	1405.9	1347.9	1279.9	1164.9	1071.9	1051.9	937.9
15°	1520.9	1530.9	1525.9	1519.9	1475.9	1417.9	1352.9	1231.9	1121.9	1096.9	958.9
17.5°	1562.9	1569.9	1570.9	1570.9	1531.9	1474.9	1411.9	1292.9	1171.9	1139.9	978.9
20°	1581.9	1589.9	1594.9	1602.9	1570.9	1521.9	1457.9	1344.9	1218.9	1182.9	997.9
22.5°	1590.9	1597.9	1610.9	1628.9	1602.9	1561.9	1502.9	1392.9	1265.9	1227.9	1019.9
25°	1597.9	1606.9	1625.9	1659.9	1641.9	1606.9	1555.9	1447.9	1321.9	1282.9	1051.9
27.5°	1616.9	1627.9	1645.9	1686.9	1664.9	1647.9	1611.9	1506.9	1380.9	1340.9	1090.9
30°	1682.9	1691.9	1690.9	1716.9	1689.9	1684.9	1659.9	1563.9	1437.9	1397.9	1136.9
32.5°	1802.9	1811.9	1789.9	1779.9	1720.9	1721.9	1711.9	1624.9	1505.9	1464.9	1189.9
35°	1931.9	1941.9	1912.9	1895.9	1796.9	1767.9	1772.9	1700.9	1581.9	1540.9	1255.9
37.5°	2046.9	2058.9	2033.9	2008.9	1908.9	1841.9	1840.9	1785.9	1668.9	1626.9	1328.9
40°	2109.8	2123.8	2138.8	2124.8	2019.9	1945.9	1913.9	1872.9	1754.9	1711.9	1407.9
42.5°	2139.8	2178.8	2205.8	2196.8	2110.8	2035.9	1997.9	1963.9	1859.9	1817.9	1501.9
45°	2055.9	2056.9	2113.8	2162.8	2146.8	2096.8	2089.8	2065.8	1979.9	1939.9	1607.9
47.5°	1950.9	1942.9	1982.9	2069.8	2114.8	2127.8	2168.8	2178.8	2116.8	2076.8	1715.9
50°	1698.9	1703.9	1833.9	1958.9	2046.9	2130.8	2224.8	2294.8	2257.8	2219.8	1829.9
52.5°	1381.9	1393.9	1542.9	1817.9	1956.9	2100.8	2257.8	2410.8	2401.8	2365.8	1943.9
55°	1107.9	1126.9	1284.9	1582.9	1841.9	2033.9	2271.8	2516.8	2550.8	2517.8	2055.9
57.5°	846.9	866.9	999.9	1305.9	1694.9	1924.9	2261.8	2609.8	2689.8	2668.8	2158.8
60°	638.0	658.0	742.9	1058.9	1510.9	1802.9	2211.8	2670.8	2814.8	2792.8	2233.8
62.5°	457.0	473.0	536.0	823.9	1286.9	1657.9	2088.8	2671.8	2885.8	2867.8	2269.8
65°	329.0	329.0	380.0	588.0	1076.9	1483.9	1902.9	2548.8	2870.8	2865.8	2244.8
67.5°	237.0	239.0	280.0	411.0	858.9	1272.9	1661.9	2329.8	2754.8	2779.8	2154.8
70°	168.0	173.0	192.0	287.0	649.0	1004.9	1403.9	2042.9	2545.8	2589.8	1980.9
72.5°	130.0	133.0	146.0	200.0	474.0	746.9	1118.9	1722.9	2266.8	2316.8	1743.9
75°	100.0	103.0	113.0	147.0	340.0	524.0	794.9	1336.9	1827.9	1916.9	1400.9
77.5°	73.0	77.0	84.0	107.0	198.0	333.0	482.0	751.9	1008.9	1050.9	733.9
80°	34.0	39.0	49.0	69.0	107.0	157.0	171.0	290.0	485.0	507.0	398.0
82.5°	19.0	24.0	28.0	42.0	54.0	56.0	58.0	73.0	183.0	202.0	167.0
85°	9.0	12.0	13.0	18.0	18.0	16.0	19.0	14.0	30.0	36.0	35.0
87.5°	0.0	1.0	2.0	5.0	4.0	3.0	3.0	3.0	3.0	4.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9
2.5°	874.9	861.9	831.9	805.9	788.9	773.9	753.9	744.9	728.9	731.9	722.9
5°	879.9	855.9	802.9	753.9	717.9	686.0	651.0	631.0	609.0	607.0	600.0
7.5°	882.9	845.9	769.9	700.9	646.0	597.0	550.0	524.0	497.0	491.0	485.0
10°	879.9	830.9	735.9	646.0	573.0	512.0	459.0	426.0	398.0	391.0	385.0
12.5°	882.9	822.9	703.9	595.0	508.0	439.0	379.0	345.0	319.0	312.0	308.0
15°	889.9	817.9	677.0	549.0	450.0	373.0	314.0	285.0	264.0	257.0	255.0
17.5°	895.9	812.9	648.0	504.0	392.0	315.0	264.0	240.0	222.0	215.0	213.0
20°	903.9	805.9	619.0	461.0	341.0	269.0	224.0	203.0	189.0	184.0	183.0
22.5°	910.9	800.9	592.0	418.0	294.0	232.0	194.0	177.0	167.0	162.0	162.0
25°	928.9	802.9	569.0	378.0	259.0	203.0	171.0	158.0	150.0	147.0	147.0
27.5°	949.9	810.9	551.0	344.0	229.0	181.0	155.0	144.0	140.0	136.0	137.0
30°	979.9	826.9	539.0	316.0	207.0	164.0	142.0	134.0	130.0	129.0	129.0
32.5°	1017.9	852.9	538.0	298.0	191.0	151.0	133.0	126.0	124.0	123.0	123.0
35°	1062.9	875.9	532.0	290.0	181.0	142.0	126.0	121.0	120.0	120.0	120.0
37.5°	1116.9	913.9	528.0	279.0	176.0	137.0	121.0	117.0	117.0	117.0	117.0
40°	1172.9	944.9	522.0	269.0	174.0	134.0	118.0	113.0	113.0	113.0	113.0
42.5°	1239.9	989.9	520.0	264.0	171.0	132.0	114.0	108.0	109.0	109.0	110.0
45°	1320.9	1040.9	519.0	259.0	170.0	130.0	110.0	103.0	104.0	103.0	103.0
47.5°	1402.9	1099.9	522.0	256.0	169.0	128.0	107.0	98.0	98.0	97.0	97.0
50°	1488.9	1153.9	524.0	253.0	167.0	124.0	102.0	94.0	92.0	90.0	91.0
52.5°	1569.9	1203.9	525.0	248.0	161.0	118.0	98.0	89.0	86.0	83.0	84.0
55°	1650.9	1251.9	527.0	242.0	153.0	112.0	93.0	84.0	80.0	76.0	76.0
57.5°	1723.9	1293.9	522.0	227.0	144.0	106.0	88.0	78.0	72.0	68.0	68.0
60°	1773.9	1323.9	507.0	205.0	132.0	99.0	83.0	72.0	65.0	62.0	62.0
62.5°	1797.9	1328.9	480.0	169.0	117.0	92.0	77.0	66.0	60.0	58.0	58.0
65°	1774.9	1306.9	438.0	127.0	101.0	84.0	71.0	61.0	55.0	50.0	50.0
67.5°	1694.9	1244.9	380.0	96.0	86.0	76.0	65.0	56.0	49.0	45.0	45.0
70°	1533.9	1115.9	294.0	77.0	73.0	66.0	59.0	50.0	44.0	39.0	39.0
72.5°	1322.9	945.9	207.0	62.0	62.0	56.0	50.0	44.0	38.0	34.0	34.0
75°	1014.9	699.9	139.0	50.0	51.0	47.0	41.0	36.0	32.0	29.0	29.0
77.5°	554.0	346.0	85.0	37.0	38.0	36.0	32.0	29.0	27.0	24.0	24.0
80°	269.0	152.0	49.0	26.0	27.0	26.0	24.0	21.0	21.0	19.0	19.0
82.5°	113.0	57.0	26.0	18.0	18.0	16.0	15.0	15.0	15.0	14.0	14.0
85°	28.0	11.0	11.0	10.0	10.0	10.0	9.0	9.0	9.0	7.0	8.0
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	3.0	1.0	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)