

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: P799042

Luminaire Tested: **ARCH1-50-750-U-T2R-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4872 lumens
Efficiency: N/A
Efficacy: 91.9 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

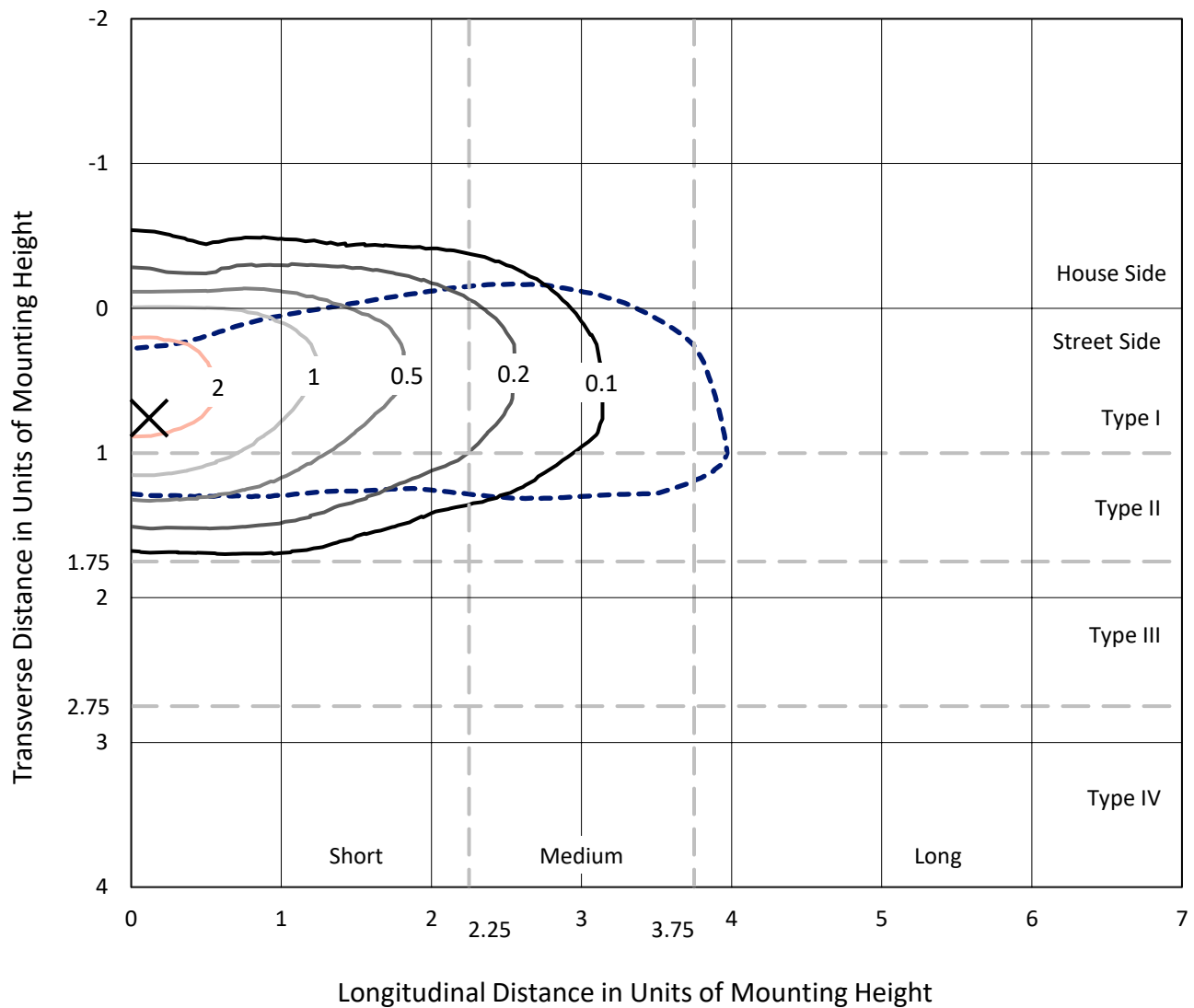


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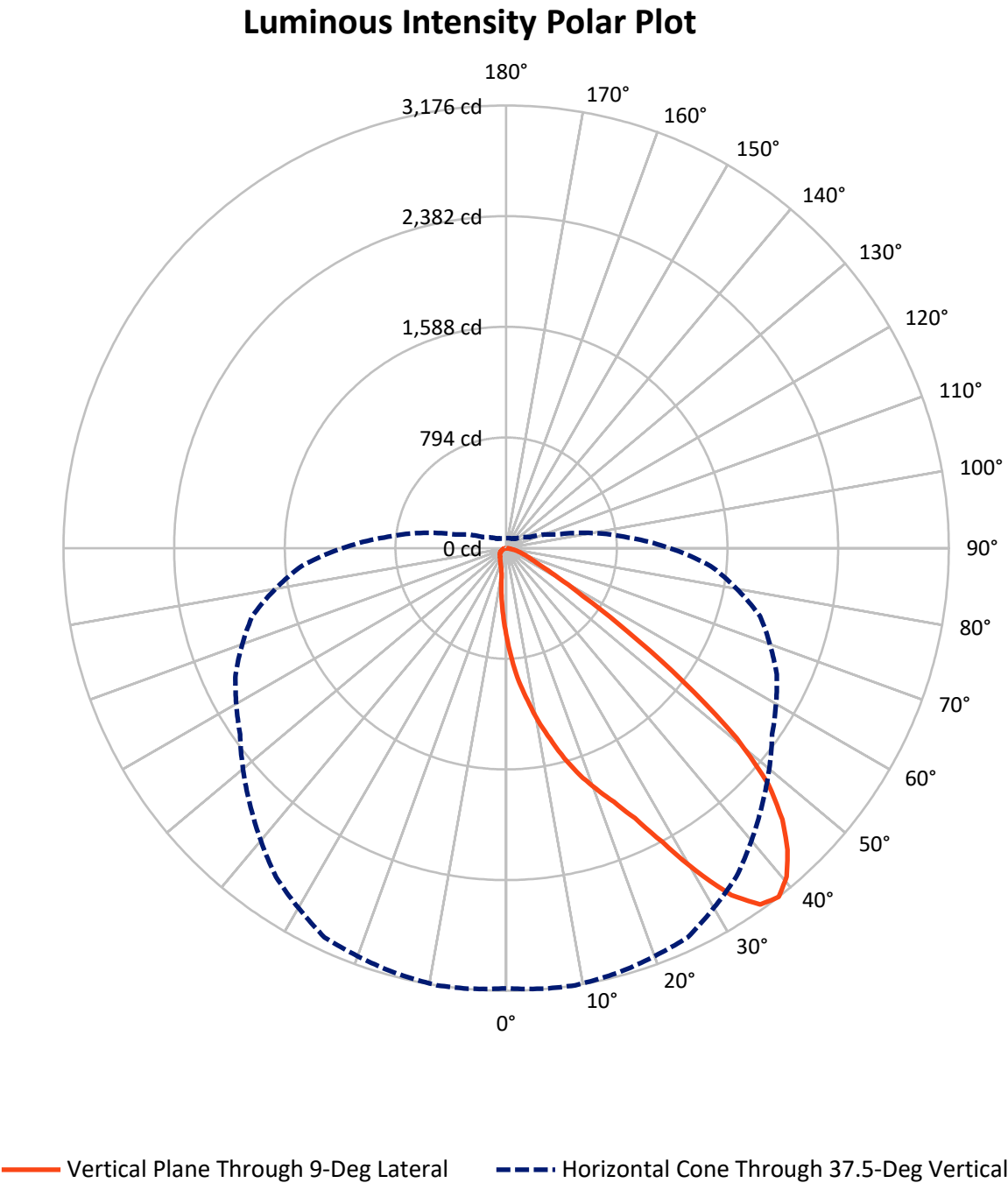
Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type II - Short - N/A

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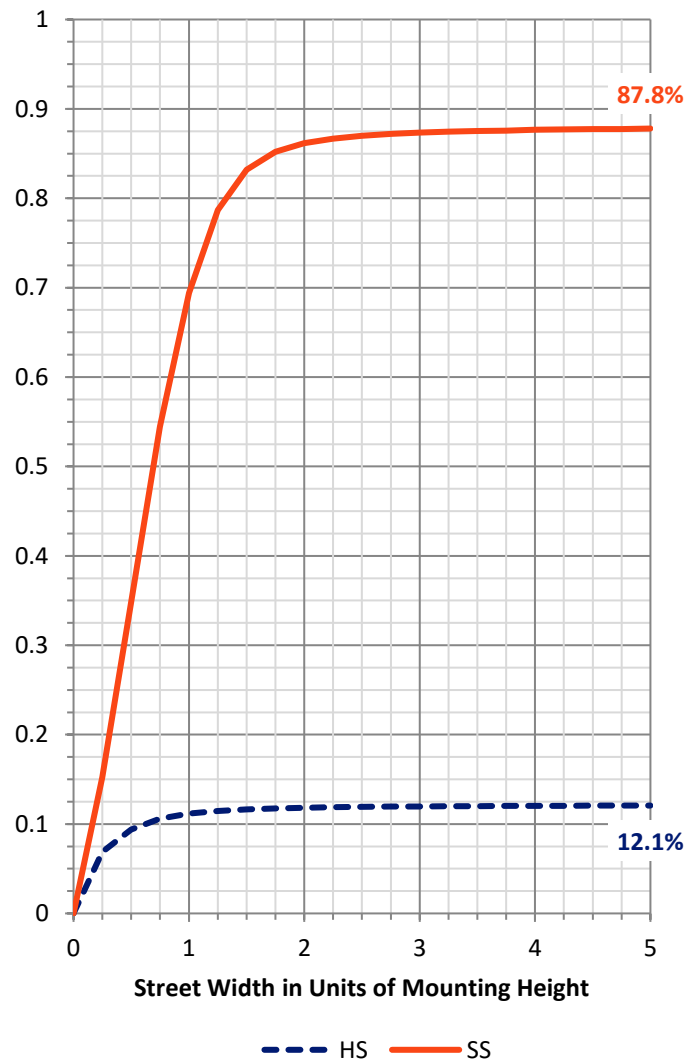
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	592.5	0.0	592.5
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	4279.5	0.0	4279.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	4872.0	0.0	4872.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	1.3
10°-20°	225.0	4.6
20°-30°	462.3	9.5
30°-40°	817.2	16.8
40°-50°	1085.5	22.3
50°-60°	1029.6	21.1
60°-70°	785.5	16.1
70°-80°	380.8	7.8
80°-90°	21.4	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°	4872.0	100.0
0°-180°	4872.0	100.0

Coefficient of Utilization



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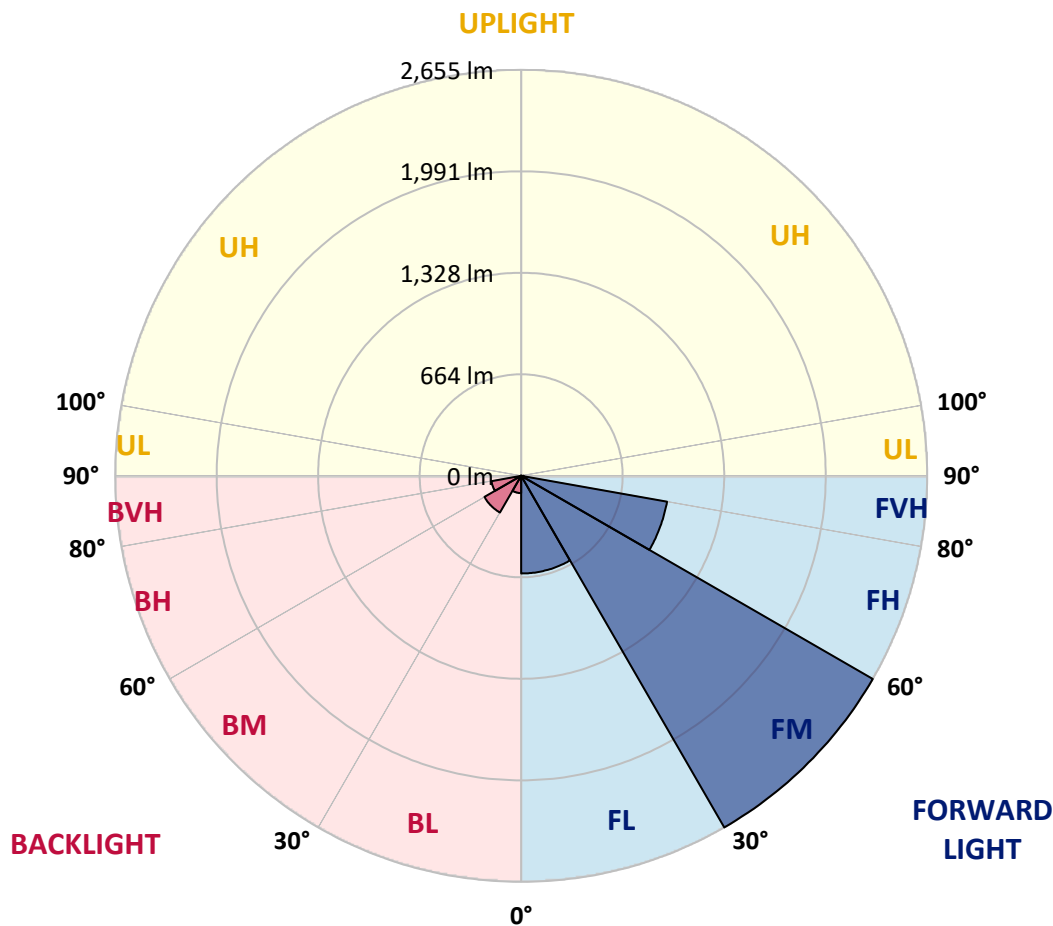
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	639.0	13.1			
FM	(30°-60°)	2655.0	54.5			
FH	(60°-80°)	968.5	19.9			G1/1800
FVH	(80°-90°)	17.0	0.3			G1/100
BL	(0°-30°)	113.1	2.3	B1/500		
BM	(30°-60°)	277.3	5.7	B1/1000		
BH	(60°-80°)	197.7	4.1	B1/500		G1/500
BVH	(80°-90°)	4.5	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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0
2.5°	798.0	784.0	800.0	798.0	784.0	775.0	747.0	738.0	705.0	681.0	660.0
5°	962.0	948.0	962.0	958.0	938.0	916.0	870.0	840.0	781.0	729.0	682.0
7.5°	1098.0	1098.0	1104.0	1105.0	1081.0	1047.0	990.0	945.0	862.0	782.0	707.0
10°	1245.0	1246.0	1259.0	1250.0	1218.0	1172.0	1100.0	1043.0	943.0	838.0	731.0
12.5°	1402.0	1403.0	1407.0	1403.0	1365.0	1306.0	1219.0	1144.0	1029.0	902.0	764.0
15°	1559.0	1560.0	1565.0	1558.0	1516.0	1447.0	1348.0	1256.0	1120.0	974.0	804.0
17.5°	1706.1	1708.1	1712.1	1703.1	1659.1	1577.0	1476.0	1365.0	1217.0	1051.0	849.0
20°	1838.1	1840.1	1843.1	1831.1	1787.1	1705.1	1596.0	1480.0	1316.0	1130.0	898.0
22.5°	1971.1	1973.1	1978.1	1962.1	1913.1	1819.1	1712.1	1592.0	1421.0	1217.0	955.0
25°	2141.1	2143.1	2147.1	2124.1	2057.1	1947.1	1834.1	1711.1	1535.0	1315.0	1025.0
27.5°	2390.1	2388.1	2388.1	2346.1	2231.1	2088.1	1957.1	1832.1	1658.1	1420.0	1102.0
30°	2698.1	2693.1	2690.1	2633.1	2469.1	2247.1	2083.1	1945.1	1776.1	1531.0	1185.0
32.5°	2974.1	2974.1	2968.1	2908.1	2734.1	2461.1	2217.1	2055.1	1890.1	1643.0	1271.0
35°	3137.1	3144.1	3141.1	3096.1	2969.1	2691.1	2398.1	2187.1	2010.1	1760.1	1374.0
37.5°	3159.1	3173.1	3176.1	3149.1	3082.1	2879.1	2599.1	2330.1	2142.1	1886.1	1474.0
40°	3070.1	3100.1	3100.1	3096.1	3072.1	2968.1	2768.1	2496.1	2278.1	2017.1	1575.0
42.5°	2933.1	2964.1	2960.1	2975.1	2969.1	2947.1	2863.1	2651.1	2414.1	2152.1	1667.1
45°	2754.1	2786.1	2778.1	2805.1	2817.1	2841.1	2853.1	2759.1	2548.1	2299.1	1770.1
47.5°	2467.1	2521.1	2533.1	2581.1	2631.1	2706.1	2763.1	2798.1	2673.1	2457.1	1882.1
50°	2043.1	2119.1	2143.1	2244.1	2381.1	2536.1	2628.1	2750.1	2761.1	2619.1	2003.1
52.5°	1463.0	1551.0	1588.0	1754.1	2036.1	2306.1	2472.1	2644.1	2795.1	2774.1	2134.1
55°	946.0	1021.0	1057.0	1213.0	1588.0	2012.1	2288.1	2507.1	2776.1	2916.1	2284.1
57.5°	583.0	626.0	650.0	784.0	1129.0	1635.0	2047.1	2381.1	2718.1	3039.1	2440.1
60°	393.0	418.0	430.0	493.0	767.0	1222.0	1716.1	2249.1	2642.1	3122.1	2582.1
62.5°	261.0	269.0	281.0	320.0	506.0	858.0	1318.0	2013.1	2585.1	3127.1	2687.1
65°	202.0	206.0	211.0	228.0	312.0	600.0	927.0	1631.0	2500.1	3021.1	2720.1
67.5°	159.0	163.0	169.0	178.0	226.0	407.0	631.0	1195.0	2326.1	2855.1	2666.1
70°	125.0	128.0	132.0	140.0	176.0	295.0	417.0	794.0	1975.1	2697.1	2496.1
72.5°	99.0	102.0	106.0	114.0	143.0	216.0	286.0	495.0	1523.0	2504.1	2169.1
75°	78.0	80.0	83.0	91.0	115.0	168.0	194.0	296.0	1035.0	2151.1	1690.1
77.5°	39.0	48.0	55.0	63.0	84.0	116.0	129.0	164.0	437.0	1104.0	806.0
80°	23.0	28.0	30.0	35.0	55.0	70.0	70.0	66.0	138.0	424.0	329.0
82.5°	13.0	18.0	19.0	20.0	33.0	40.0	32.0	24.0	28.0	142.0	96.0
85°	4.0	6.0	7.0	8.0	11.0	12.0	11.0	10.0	8.0	14.0	9.0
87.5°	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0
2.5°	648.0	635.0	610.0	587.0	565.0	549.0	534.0	520.0	510.0	502.0	501.0
5°	657.0	631.0	583.0	538.0	497.0	463.0	434.0	411.0	394.0	382.0	381.0
7.5°	669.0	629.0	556.0	489.0	428.0	379.0	337.0	306.0	284.0	275.0	268.0
10°	679.0	627.0	529.0	440.0	360.0	298.0	248.0	217.0	201.0	195.0	192.0
12.5°	696.0	629.0	506.0	395.0	301.0	228.0	190.0	173.0	166.0	161.0	160.0
15°	721.0	638.0	484.0	351.0	241.0	184.0	162.0	151.0	144.0	143.0	142.0
17.5°	746.0	646.0	464.0	306.0	200.0	160.0	145.0	136.0	131.0	130.0	130.0
20°	775.0	656.0	442.0	263.0	171.0	144.0	132.0	125.0	119.0	118.0	118.0
22.5°	809.0	670.0	421.0	225.0	152.0	132.0	122.0	114.0	109.0	108.0	108.0
25°	855.0	691.0	404.0	197.0	139.0	122.0	113.0	106.0	102.0	100.0	100.0
27.5°	906.0	720.0	392.0	180.0	130.0	114.0	105.0	99.0	95.0	93.0	93.0
30°	963.0	752.0	384.0	173.0	125.0	107.0	99.0	93.0	88.0	87.0	87.0
32.5°	1026.0	789.0	379.0	174.0	124.0	102.0	93.0	87.0	83.0	81.0	81.0
35°	1096.0	830.0	376.0	180.0	126.0	98.0	88.0	82.0	78.0	76.0	76.0
37.5°	1174.0	878.0	376.0	186.0	131.0	97.0	83.0	77.0	74.0	72.0	72.0
40°	1247.0	929.0	380.0	193.0	136.0	97.0	79.0	74.0	70.0	68.0	68.0
42.5°	1304.0	958.0	383.0	200.0	139.0	96.0	75.0	70.0	67.0	65.0	65.0
45°	1369.0	989.0	377.0	203.0	139.0	94.0	72.0	67.0	64.0	62.0	62.0
47.5°	1441.0	1027.0	376.0	205.0	136.0	90.0	69.0	64.0	62.0	60.0	60.0
50°	1514.0	1069.0	378.0	204.0	132.0	84.0	65.0	62.0	59.0	57.0	57.0
52.5°	1597.0	1113.0	382.0	202.0	123.0	77.0	62.0	59.0	56.0	54.0	53.0
55°	1689.1	1161.0	390.0	198.0	111.0	70.0	59.0	56.0	52.0	50.0	49.0
57.5°	1795.1	1220.0	399.0	190.0	98.0	64.0	56.0	52.0	46.0	43.0	42.0
60°	1896.1	1287.0	409.0	171.0	85.0	58.0	53.0	47.0	41.0	39.0	38.0
62.5°	1991.1	1353.0	414.0	137.0	72.0	53.0	50.0	43.0	37.0	35.0	34.0
65°	2052.1	1425.0	403.0	93.0	59.0	49.0	46.0	40.0	34.0	31.0	31.0
67.5°	2056.1	1459.0	365.0	61.0	48.0	44.0	42.0	36.0	30.0	28.0	27.0
70°	1955.1	1408.0	279.0	48.0	40.0	38.0	38.0	32.0	26.0	24.0	23.0
72.5°	1723.1	1247.0	178.0	39.0	34.0	32.0	32.0	27.0	23.0	20.0	19.0
75°	1360.0	962.0	95.0	32.0	28.0	27.0	25.0	22.0	19.0	17.0	16.0
77.5°	625.0	424.0	44.0	23.0	21.0	21.0	19.0	16.0	15.0	13.0	13.0
80°	247.0	144.0	22.0	15.0	14.0	14.0	14.0	11.0	11.0	9.0	8.0
82.5°	68.0	30.0	11.0	9.0	9.0	9.0	8.0	7.0	7.0	6.0	6.0
85°	7.0	5.0	5.0	5.0	5.0	4.0	4.0	3.0	2.0	2.0	2.0
87.5°	3.0	3.0	3.0	3.0	3.0	2.0	1.0	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)