

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: P265951

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2R-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA 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: 5118.4 lumens
Efficiency: N/A
Efficacy: 80.0 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): 64
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

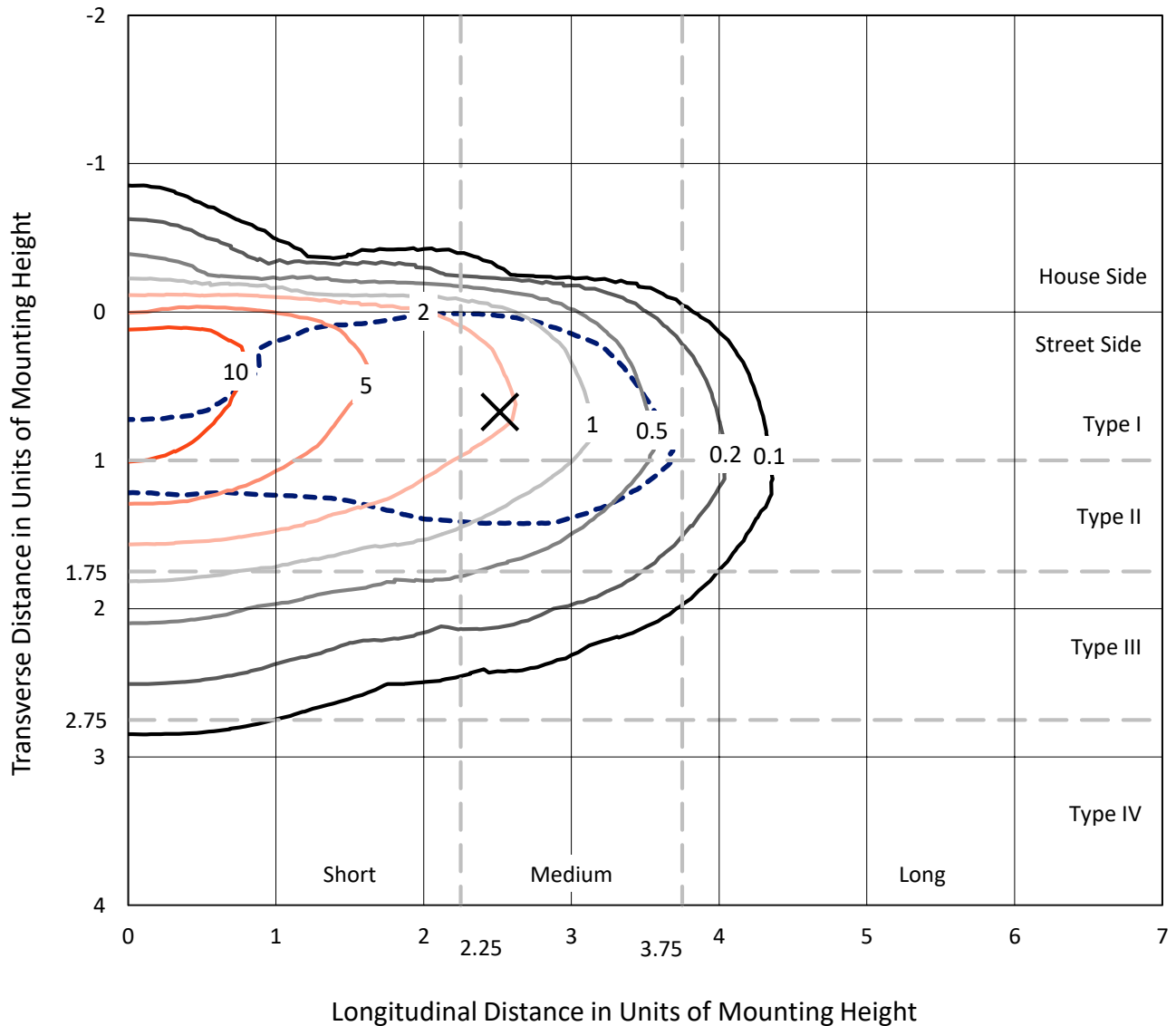


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

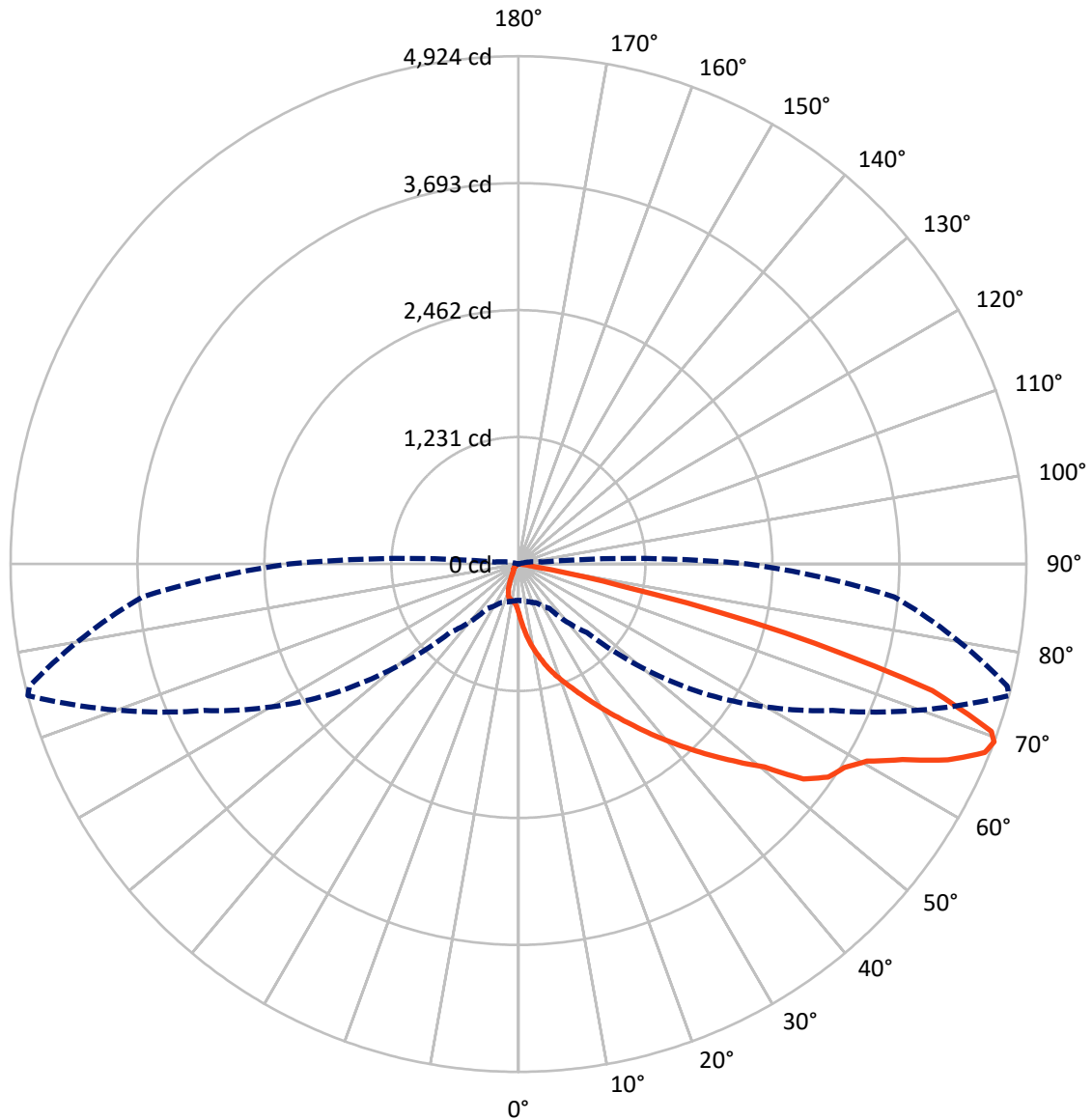


Based on 10 foot mounting height. Maximum calculated value = 13 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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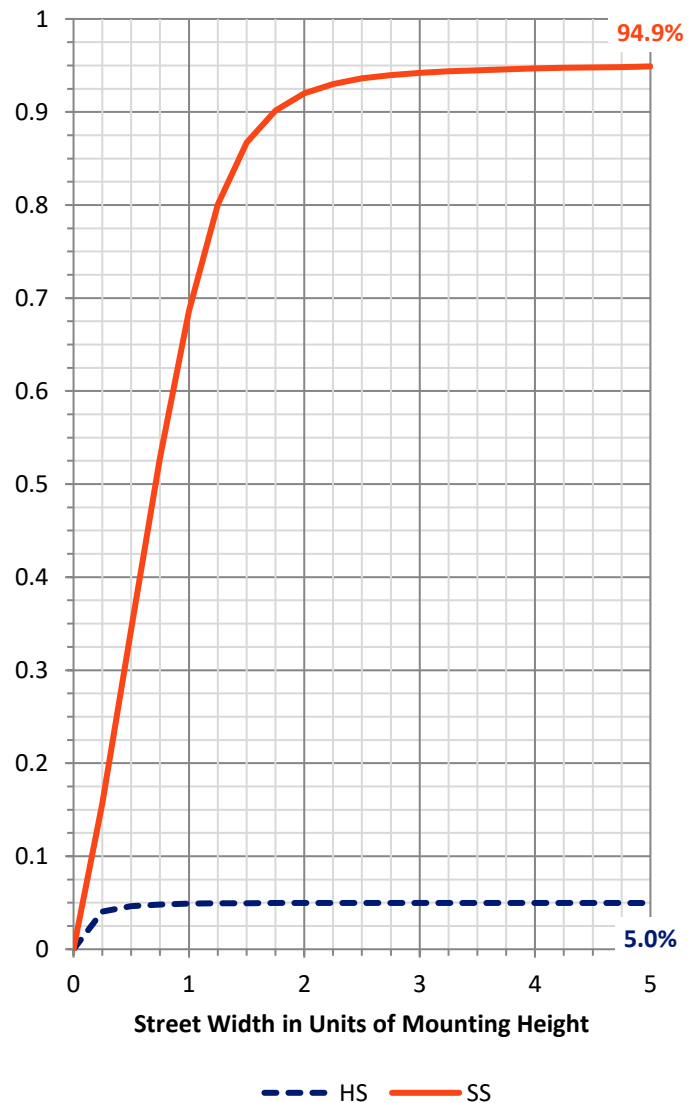
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	255.4	0.0	255.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4863.0	0.0	4863.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	5118.4	0.0	5118.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	1.1
10°-20°	198.5	3.9
20°-30°	379.0	7.4
30°-40°	679.9	13.3
40°-50°	1041.7	20.4
50°-60°	1210.7	23.7
60°-70°	1072.1	20.9
70°-80°	462.4	9.0
80°-90°	18.5	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°	5118.4	100.0
0°-180°	5118.4	100.0

Coefficient of Utilization



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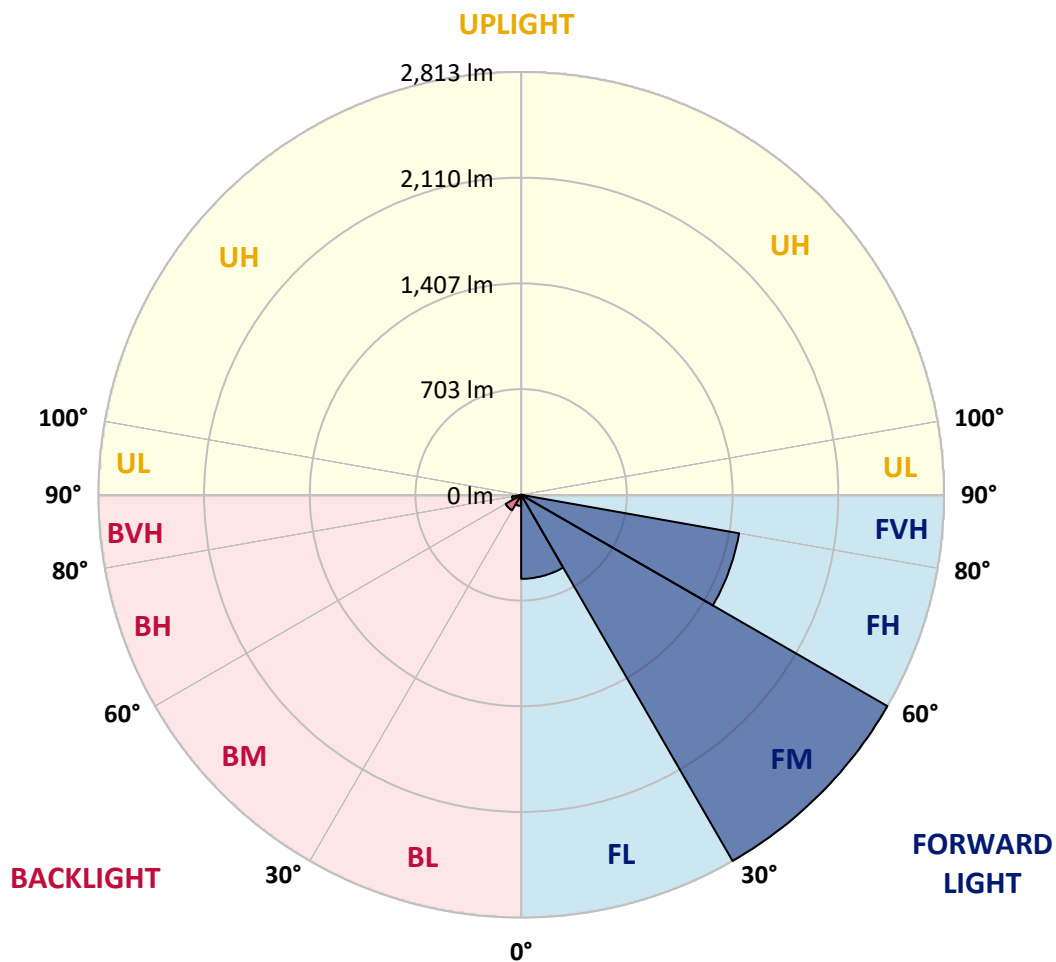
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	558.9	10.9			
FM (30°-60°)	2813.2	55.0			
FH (60°-80°)	1472.6	28.8			G1/1800
FVH (80°-90°)	18.3	0.4			G1/100
BL (0°-30°)	74.2	1.4	B0/110		
BM (30°-60°)	119.0	2.3	B0/220		
BH (60°-80°)	61.9	1.2	B0/110		G0/110
BVH (80°-90°)	0.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	784.6	776.9	769.0	760.2	740.4	706.1	662.9	616.5	559.1	549.3	502.8
5°	952.6	949.1	941.5	929.3	907.2	869.6	821.1	752.5	656.4	639.9	541.5
7.5°	1070.8	1068.5	1061.9	1047.6	1027.8	990.1	939.3	865.2	753.6	734.9	590.0
10°	1176.9	1175.7	1170.2	1156.9	1137.1	1096.2	1042.0	964.7	846.5	825.5	646.4
12.5°	1273.0	1274.1	1271.9	1265.3	1250.9	1212.3	1150.3	1066.4	935.9	912.8	713.9
15°	1329.3	1332.6	1341.4	1354.7	1359.1	1328.2	1264.2	1171.3	1027.8	1007.8	791.1
17.5°	1310.5	1314.0	1341.4	1386.9	1429.9	1434.4	1376.8	1270.8	1118.3	1098.4	867.5
20°	1265.3	1269.7	1298.4	1360.4	1444.2	1502.9	1479.7	1379.1	1204.4	1180.2	940.3
22.5°	1316.0	1316.0	1324.9	1362.5	1438.7	1530.4	1561.4	1487.4	1292.9	1263.0	1013.3
25°	1490.6	1487.4	1468.5	1453.1	1477.4	1559.2	1623.2	1597.8	1396.8	1362.5	1090.6
27.5°	1711.7	1727.1	1691.8	1635.5	1580.2	1615.5	1678.6	1707.3	1511.7	1476.4	1170.2
30°	1959.3	1965.9	1923.9	1848.7	1751.4	1717.2	1743.7	1801.2	1636.5	1597.8	1253.0
32.5°	2182.4	2177.0	2141.6	2063.0	1942.7	1868.7	1827.7	1876.3	1772.4	1728.2	1338.1
35°	2380.1	2384.6	2341.5	2251.0	2132.7	2054.2	1957.0	1961.4	1925.0	1874.1	1436.5
37.5°	2558.2	2550.4	2509.5	2418.9	2311.7	2226.5	2123.9	2049.8	2091.9	2038.8	1547.1
40°	2702.9	2695.2	2652.1	2563.7	2463.2	2393.5	2312.9	2168.1	2267.5	2206.7	1665.3
42.5°	2817.9	2809.0	2772.4	2687.4	2590.3	2528.3	2489.7	2313.9	2455.3	2394.6	1797.9
45°	2874.1	2866.4	2844.4	2780.3	2695.2	2641.0	2659.8	2481.8	2656.5	2605.7	1943.8
47.5°	2807.9	2804.6	2830.0	2818.9	2770.4	2741.5	2806.8	2665.4	2867.6	2817.9	2111.7
50°	2606.7	2612.4	2686.3	2778.1	2801.3	2835.5	2927.2	2858.6	3094.1	3041.0	2305.1
52.5°	2110.6	2148.1	2371.3	2592.4	2763.6	2893.0	3068.7	3134.9	3463.1	3411.3	2606.7
55°	1575.7	1591.3	1834.3	2212.3	2612.4	2888.5	3173.6	3297.4	3645.5	3592.4	2686.3
57.5°	1249.8	1255.3	1375.8	1761.4	2300.6	2789.1	3228.9	3356.0	3725.0	3680.8	2804.6
60°	981.3	987.9	1075.2	1340.5	1861.9	2520.6	3149.4	3406.8	3880.9	3845.6	3011.2
62.5°	763.6	770.1	823.2	979.1	1396.8	2107.3	2989.1	3488.6	4176.9	4160.4	3349.3
65°	591.2	593.4	629.9	702.8	986.8	1659.8	2793.5	3564.8	4577.0	4562.8	3623.5
67.5°	436.4	439.8	465.2	510.5	666.4	1192.3	2473.0	3506.3	4878.8	4836.7	3722.8
69°	352.6	355.8	377.9	414.4	526.0	939.3	2180.2	3361.5	4924.0	4884.3	3659.9
70°	301.7	303.8	325.9	356.9	448.7	797.9	1948.2	3236.7	4864.3	4825.6	3516.1
72.5°	193.3	204.5	226.6	246.4	297.2	528.3	1314.9	2684.1	4196.9	4130.5	2753.8
75°	107.2	110.5	150.2	174.6	197.7	343.6	731.5	1674.1	2669.8	2623.3	1473.0
77.5°	88.5	90.5	106.1	132.6	132.6	192.2	276.3	659.6	1015.5	916.1	398.8
80°	61.9	64.0	80.7	87.2	95.0	108.2	89.6	144.7	156.9	139.2	59.6
82.5°	43.1	45.4	55.2	71.9	76.3	50.8	33.1	43.1	45.4	45.4	23.1
85°	7.7	11.0	41.0	59.6	45.4	15.5	18.8	15.5	14.4	15.5	5.5
87.5°	0.0	0.0	25.4	28.7	24.3	6.6	7.7	5.5	3.4	4.4	2.2
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°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	479.5	456.3	416.6	387.9	363.5	344.8	337.0	324.8	316.1	320.4	314.9
5°	492.8	451.9	387.9	346.9	318.3	293.9	274.1	258.6	246.4	244.2	242.1
7.5°	513.8	455.4	371.3	320.4	277.3	239.8	208.9	185.6	168.0	168.0	161.3
10°	542.5	464.2	361.4	293.9	229.8	179.0	148.1	126.0	117.0	116.1	113.8
12.5°	582.3	480.8	353.7	259.7	179.0	130.4	111.6	103.8	100.6	99.4	98.4
15°	636.4	504.9	344.8	217.7	136.0	107.2	99.4	92.9	89.6	88.5	87.2
17.5°	688.5	527.0	325.9	174.6	110.5	97.2	88.5	82.9	78.4	77.3	77.3
20°	737.1	545.9	293.9	136.0	99.4	87.2	78.4	71.9	67.5	66.4	66.4
22.5°	788.0	561.4	254.2	110.5	90.5	77.3	68.5	61.9	57.4	56.4	55.2
25°	842.0	572.4	208.9	98.4	81.7	68.5	58.6	53.0	49.8	48.6	47.5
27.5°	900.6	576.8	165.7	89.6	71.9	59.6	50.8	45.4	43.1	42.0	42.0
30°	953.6	572.4	128.2	79.6	63.1	51.9	44.1	39.7	37.5	36.6	36.6
32.5°	1008.8	561.4	102.8	70.7	55.2	44.1	37.5	34.2	33.1	32.1	32.1
35°	1067.5	547.0	88.5	63.1	47.5	38.6	33.1	30.9	29.9	28.7	28.7
37.5°	1135.9	529.3	80.7	56.4	42.0	34.2	28.7	27.6	26.5	26.5	26.5
40°	1213.3	507.3	75.2	50.8	37.5	29.9	25.4	24.3	23.1	23.1	23.1
42.5°	1295.0	481.9	69.6	45.4	33.1	25.4	22.1	22.1	21.0	21.0	19.9
45°	1386.9	456.3	64.0	39.7	28.7	22.1	18.8	17.6	17.6	16.6	16.6
47.5°	1495.0	433.2	58.6	35.4	25.4	18.8	16.6	15.5	14.4	13.2	13.2
50°	1647.6	430.9	51.9	30.9	23.1	15.5	13.2	12.1	11.0	9.9	9.9
52.5°	1798.9	411.1	44.1	25.4	18.8	13.2	9.9	8.9	7.7	7.7	6.6
55°	1833.3	377.9	38.6	22.1	14.4	9.9	7.7	5.5	5.5	4.4	4.4
57.5°	1908.4	362.5	33.1	17.6	11.0	7.7	4.4	3.4	3.4	3.4	3.4
60°	2056.5	358.1	28.7	15.5	7.7	5.5	3.4	2.2	2.2	1.1	1.1
62.5°	2260.9	353.7	24.3	13.2	5.5	3.4	2.2	1.1	0.0	0.0	0.0
65°	2373.6	323.7	19.9	9.9	4.4	3.4	1.1	0.0	0.0	0.0	0.0
67.5°	2343.8	267.4	17.6	6.6	3.4	2.2	1.1	0.0	0.0	0.0	0.0
69°	2219.0	225.5	14.4	5.5	3.4	2.2	1.1	0.0	0.0	0.0	0.0
70°	2068.5	194.6	13.2	4.4	2.2	1.1	1.1	0.0	0.0	0.0	0.0
72.5°	1468.5	101.7	8.9	3.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	686.2	45.4	5.5	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	151.4	21.0	3.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	28.7	7.7	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	9.9	3.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	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)