

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: P214660

Luminaire Tested: **ARCH-AF24-50-D-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214660
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-AF24-50-D-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 670mA 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: 5248.8 lumens
Efficiency: N/A
Efficacy: 97.2 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

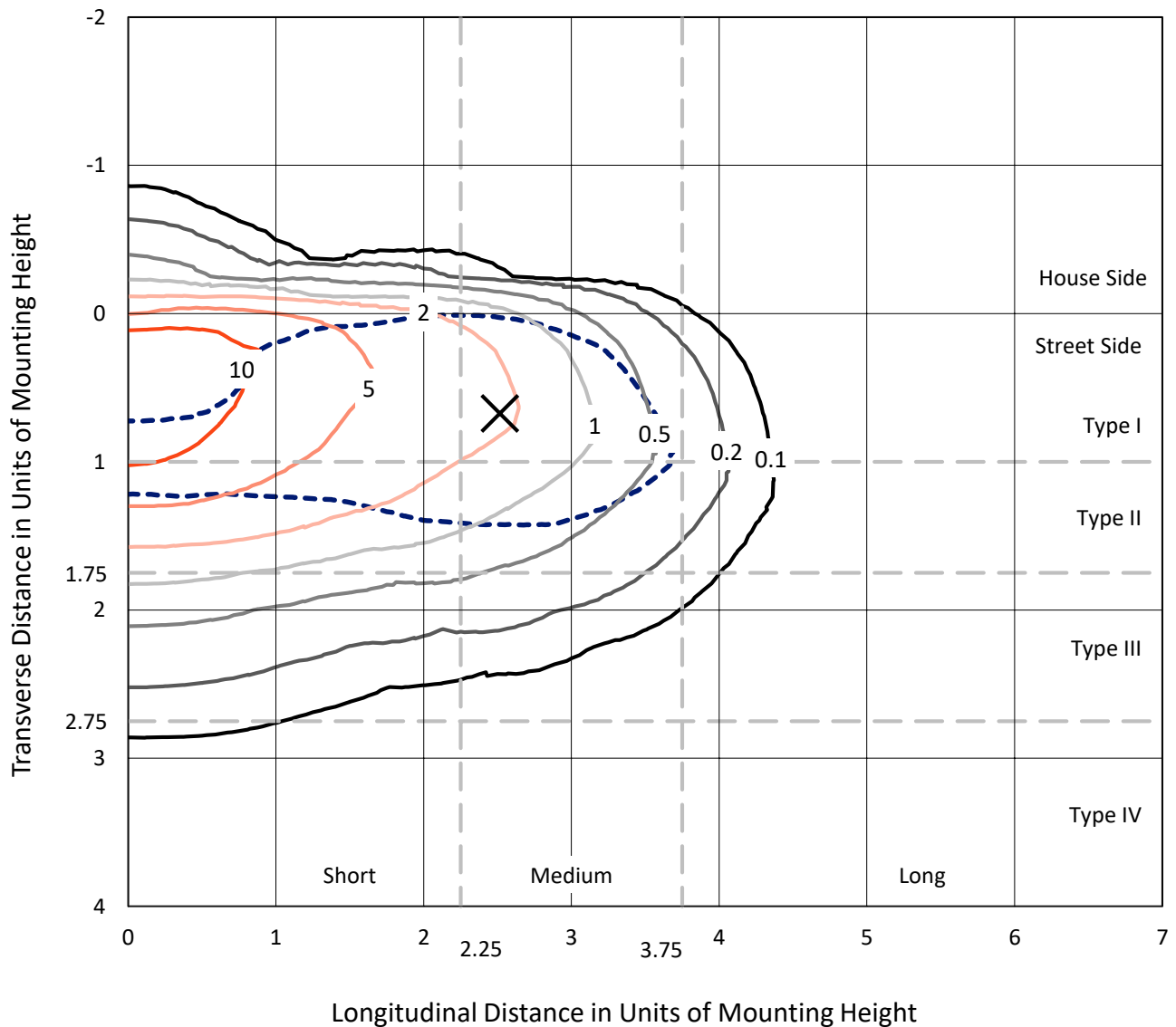
Input Watts (W): 54
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

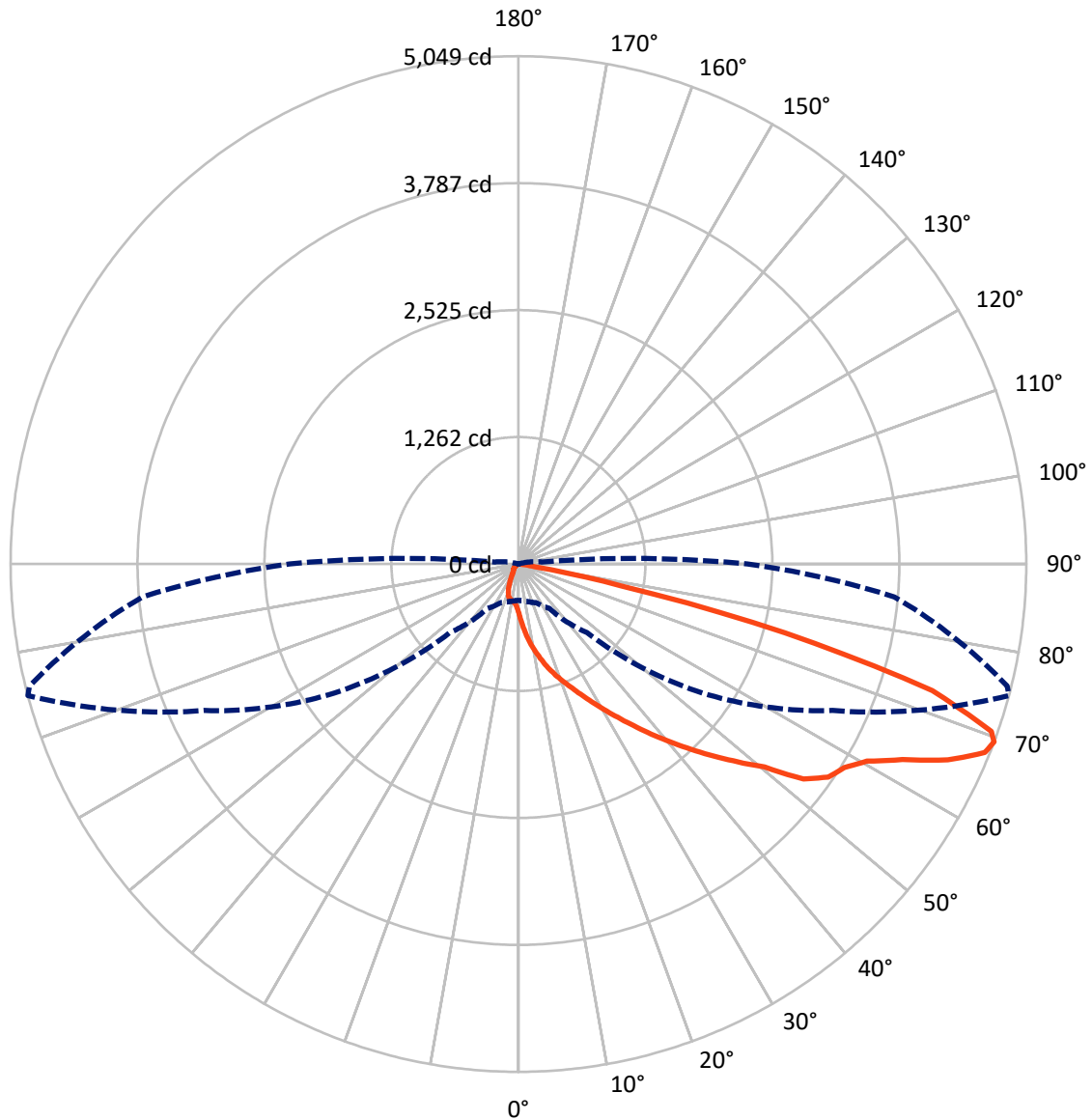
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.4 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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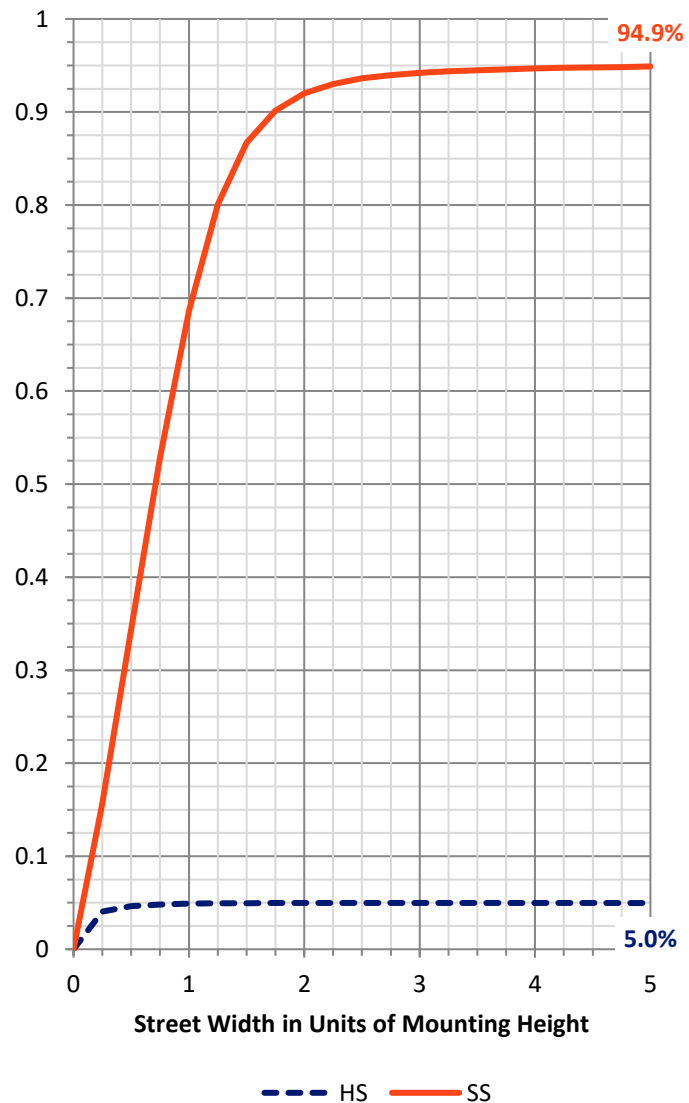
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	261.9	0.0	261.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	4986.9	0.0	4986.9
	% Fixture	95.0	0.0	95.0
Total	Lumens	5248.8	0.0	5248.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	1.1
10°-20°	203.6	3.9
20°-30°	388.7	7.4
30°-40°	697.2	13.3
40°-50°	1068.2	20.4
50°-60°	1241.5	23.7
60°-70°	1099.4	20.9
70°-80°	474.2	9.0
80°-90°	19.0	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°	5248.8	100.0
0°-180°	5248.8	100.0

Coefficient of Utilization



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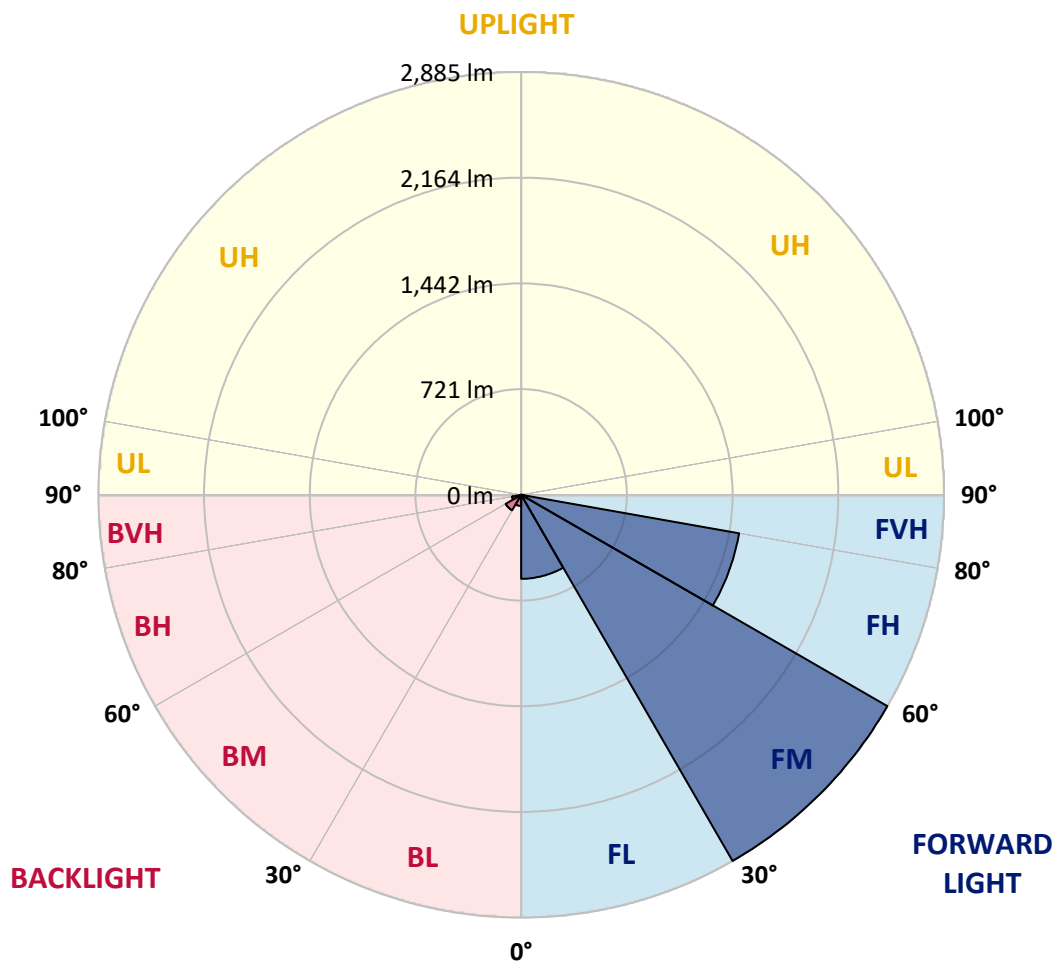
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	573.2	10.9			
FM (30°-60°)	2884.9	55.0			
FH (60°-80°)	1510.1	28.8			G1/1800
FVH (80°-90°)	18.7	0.4			G1/100
BL (0°-30°)	76.1	1.4	B0/110		
BM (30°-60°)	122.1	2.3	B0/220		
BH (60°-80°)	63.4	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°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	804.6	796.6	788.7	779.6	759.2	724.0	679.9	632.3	573.4	563.1	515.6
5°	976.8	973.4	965.5	953.0	930.4	891.8	842.0	771.7	673.1	656.1	555.3
7.5°	1098.0	1095.8	1088.9	1074.2	1053.8	1015.3	963.2	887.3	772.8	753.5	605.1
10°	1206.8	1205.6	1200.0	1186.4	1166.1	1124.1	1068.6	989.3	868.0	846.5	662.9
12.5°	1305.4	1306.5	1304.3	1297.5	1282.8	1243.1	1179.7	1093.5	959.8	936.0	732.0
15°	1363.2	1366.6	1375.7	1389.3	1393.8	1362.1	1296.4	1201.1	1053.8	1033.5	811.3
17.5°	1344.0	1347.3	1375.7	1422.1	1466.3	1470.9	1411.9	1303.1	1146.7	1126.4	889.6
20°	1297.5	1302.0	1331.5	1394.9	1481.0	1541.1	1517.3	1414.2	1235.1	1210.3	964.3
22.5°	1349.6	1349.6	1358.7	1397.1	1475.4	1569.4	1601.1	1525.2	1325.8	1295.3	1039.1
25°	1528.6	1525.2	1506.0	1490.1	1515.1	1598.9	1664.6	1638.6	1432.3	1397.1	1118.4
27.5°	1755.3	1771.1	1734.9	1677.1	1620.5	1656.7	1721.3	1750.8	1550.2	1513.9	1200.0
30°	2009.1	2015.9	1972.9	1895.8	1796.1	1760.9	1788.1	1847.0	1678.3	1638.6	1285.0
32.5°	2238.0	2232.4	2196.1	2115.7	1992.1	1916.2	1874.3	1924.1	1817.6	1772.3	1372.3
35°	2440.9	2445.4	2401.2	2308.3	2187.0	2106.6	2006.8	2011.3	1974.0	1921.8	1473.2
37.5°	2623.3	2615.4	2573.4	2480.6	2370.6	2283.3	2178.0	2102.1	2145.1	2090.7	1586.4
40°	2771.7	2763.8	2719.6	2629.0	2525.9	2454.5	2371.7	2223.3	2325.3	2263.0	1707.7
42.5°	2889.5	2880.5	2843.1	2755.8	2656.2	2592.7	2553.0	2372.8	2517.9	2455.6	1843.7
45°	2947.3	2939.4	2916.7	2851.1	2763.8	2708.3	2727.5	2545.1	2724.1	2672.0	1993.2
47.5°	2879.4	2876.0	2902.0	2890.8	2840.8	2811.4	2878.3	2733.2	2940.6	2889.5	2165.5
50°	2673.2	2678.8	2754.7	2848.8	2872.5	2907.7	3001.7	2931.5	3172.9	3118.5	2363.8
52.5°	2164.4	2202.9	2431.8	2658.4	2834.1	2966.7	3146.8	3214.8	3551.4	3498.1	2673.2
55°	1615.9	1631.8	1881.1	2268.6	2678.8	2962.1	3254.4	3381.4	3738.3	3684.0	2754.7
57.5°	1281.7	1287.3	1410.8	1806.2	2359.2	2860.1	3311.1	3441.4	3819.9	3774.6	2876.0
60°	1006.3	1013.0	1102.5	1374.5	1909.3	2584.8	3229.6	3493.6	3979.7	3943.4	3087.9
62.5°	783.1	789.8	844.2	1004.0	1432.3	2161.0	3065.2	3577.4	4283.4	4266.4	3434.7
65°	606.2	608.6	645.9	720.7	1011.9	1702.0	2864.7	3655.6	4693.6	4678.9	3715.7
67.5°	447.6	451.0	477.1	523.5	683.3	1222.7	2536.0	3595.6	5002.9	4959.9	3817.7
69°	361.5	364.9	387.5	424.9	539.4	963.2	2235.8	3447.1	5049.4	5008.6	3753.0
70°	309.3	311.6	334.3	366.0	460.0	818.2	1997.8	3319.1	4988.2	4948.5	3605.7
72.5°	198.4	209.6	232.3	252.7	304.8	541.7	1348.5	2752.5	4303.8	4235.7	2823.9
75°	110.0	113.3	154.2	179.0	202.9	352.4	750.1	1716.7	2737.7	2690.2	1510.5
77.5°	90.6	92.9	108.7	136.0	136.0	197.1	283.3	676.5	1041.4	939.4	409.1
80°	63.4	65.7	82.8	89.5	97.5	111.1	91.8	148.4	160.9	142.8	61.2
82.5°	44.2	46.4	56.7	73.7	78.2	52.2	34.0	44.2	46.4	46.4	23.8
85°	8.0	11.4	41.9	61.2	46.4	15.9	19.2	15.9	14.7	15.9	5.6
87.5°	0.0	0.0	26.1	29.5	25.0	6.8	8.0	5.6	3.4	4.5	2.3
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°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	491.8	468.0	427.2	397.7	372.8	353.5	345.7	333.2	324.1	328.6	322.9
5°	505.4	463.5	397.7	355.8	326.3	301.5	281.0	265.1	252.7	250.4	248.2
7.5°	526.9	466.9	380.7	328.6	284.4	245.9	214.2	190.4	172.3	172.3	165.4
10°	556.4	476.0	370.5	301.5	235.7	183.6	151.8	129.2	120.1	119.0	116.7
12.5°	597.2	493.0	362.6	266.3	183.6	133.7	114.5	106.5	103.1	102.0	100.9
15°	652.7	517.8	353.5	223.2	139.4	110.0	102.0	95.2	91.8	90.6	89.5
17.5°	705.9	540.5	334.3	179.0	113.3	99.7	90.6	85.0	80.4	79.3	79.3
20°	755.9	559.8	301.5	139.4	102.0	89.5	80.4	73.7	69.2	68.0	68.0
22.5°	807.9	575.6	260.6	113.3	92.9	79.3	70.3	63.4	58.9	57.8	56.7
25°	863.5	587.0	214.2	100.9	83.9	70.3	60.0	54.4	50.9	49.8	48.7
27.5°	923.5	591.5	170.0	91.8	73.7	61.2	52.2	46.4	44.2	43.1	43.1
30°	977.9	587.0	131.4	81.6	64.5	53.3	45.3	40.8	38.6	37.4	37.4
32.5°	1034.6	575.6	105.4	72.5	56.7	45.3	38.6	35.1	34.0	32.8	32.8
35°	1094.7	560.9	90.6	64.5	48.7	39.7	34.0	31.7	30.6	29.5	29.5
37.5°	1164.9	542.8	82.8	57.8	43.1	35.1	29.5	28.3	27.2	27.2	27.2
40°	1244.2	520.2	77.0	52.2	38.6	30.6	26.1	25.0	23.8	23.8	23.8
42.5°	1328.1	494.1	71.4	46.4	34.0	26.1	22.7	22.7	21.5	21.5	20.4
45°	1422.1	468.0	65.7	40.8	29.5	22.7	19.2	18.1	18.1	17.0	17.0
47.5°	1533.2	444.2	60.0	36.2	26.1	19.2	17.0	15.9	14.7	13.6	13.6
50°	1689.5	441.9	53.3	31.7	23.8	15.9	13.6	12.5	11.4	10.2	10.2
52.5°	1844.8	421.6	45.3	26.1	19.2	13.6	10.2	9.1	8.0	8.0	6.8
55°	1879.9	387.5	39.7	22.7	14.7	10.2	8.0	5.6	5.6	4.5	4.5
57.5°	1957.0	371.6	34.0	18.1	11.4	8.0	4.5	3.4	3.4	3.4	3.4
60°	2108.8	367.1	29.5	15.9	8.0	5.6	3.4	2.3	2.3	1.1	1.1
62.5°	2318.4	362.6	25.0	13.6	5.6	3.4	2.3	1.1	0.0	0.0	0.0
65°	2434.0	332.0	20.4	10.2	4.5	3.4	1.1	0.0	0.0	0.0	0.0
67.5°	2403.4	274.3	18.1	6.8	3.4	2.3	1.1	0.0	0.0	0.0	0.0
69°	2275.3	231.2	14.7	5.6	3.4	2.3	1.1	0.0	0.0	0.0	0.0
70°	2121.3	199.5	13.6	4.5	2.3	1.1	1.1	0.0	0.0	0.0	0.0
72.5°	1506.0	104.2	9.1	3.4	2.3	1.1	0.0	0.0	0.0	0.0	0.0
75°	703.7	46.4	5.6	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	155.3	21.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	29.5	8.0	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.2	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)