

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: P257698

Luminaire Tested: **ARCH-AF24-80-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-80-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6392.4 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

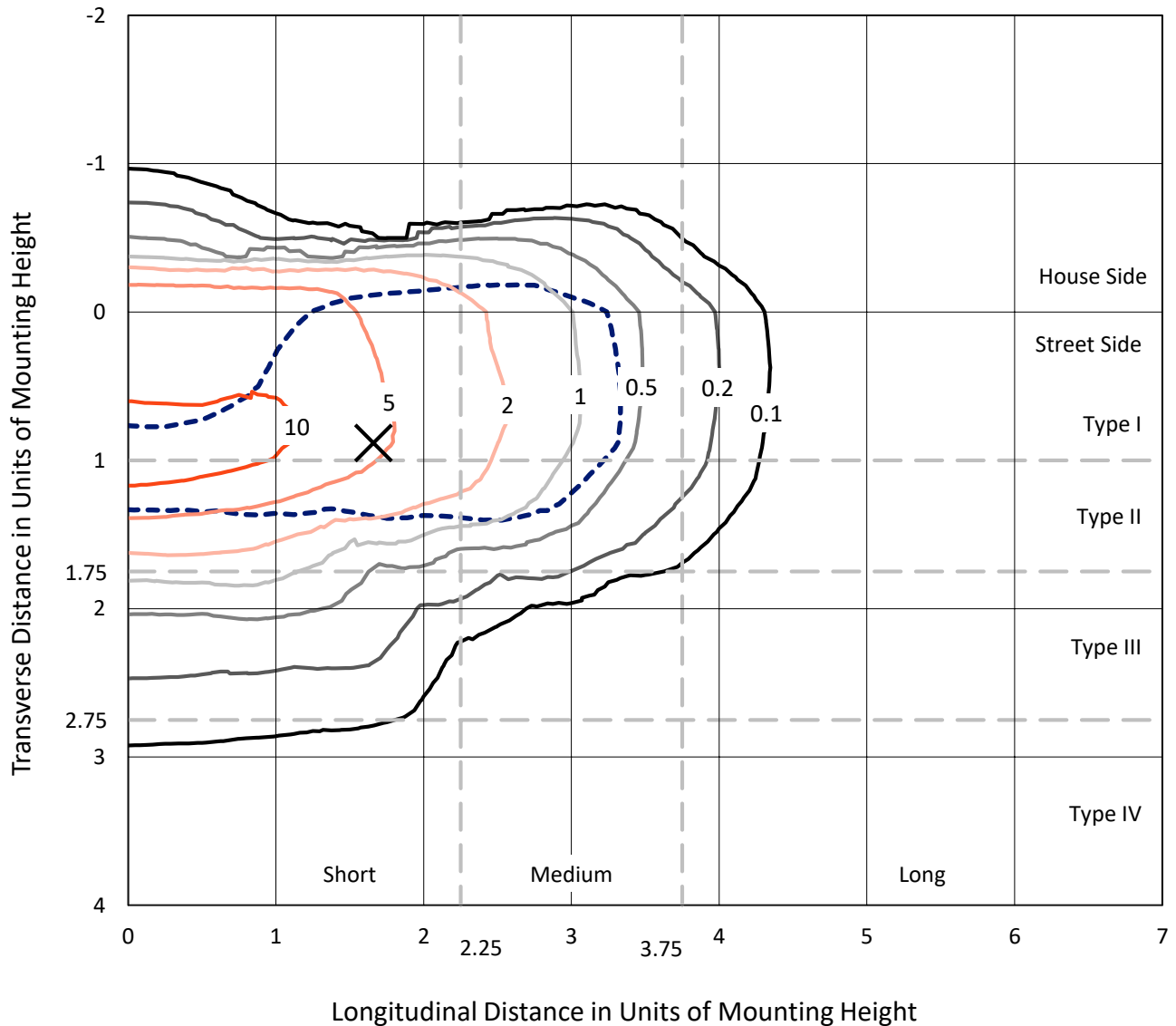
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

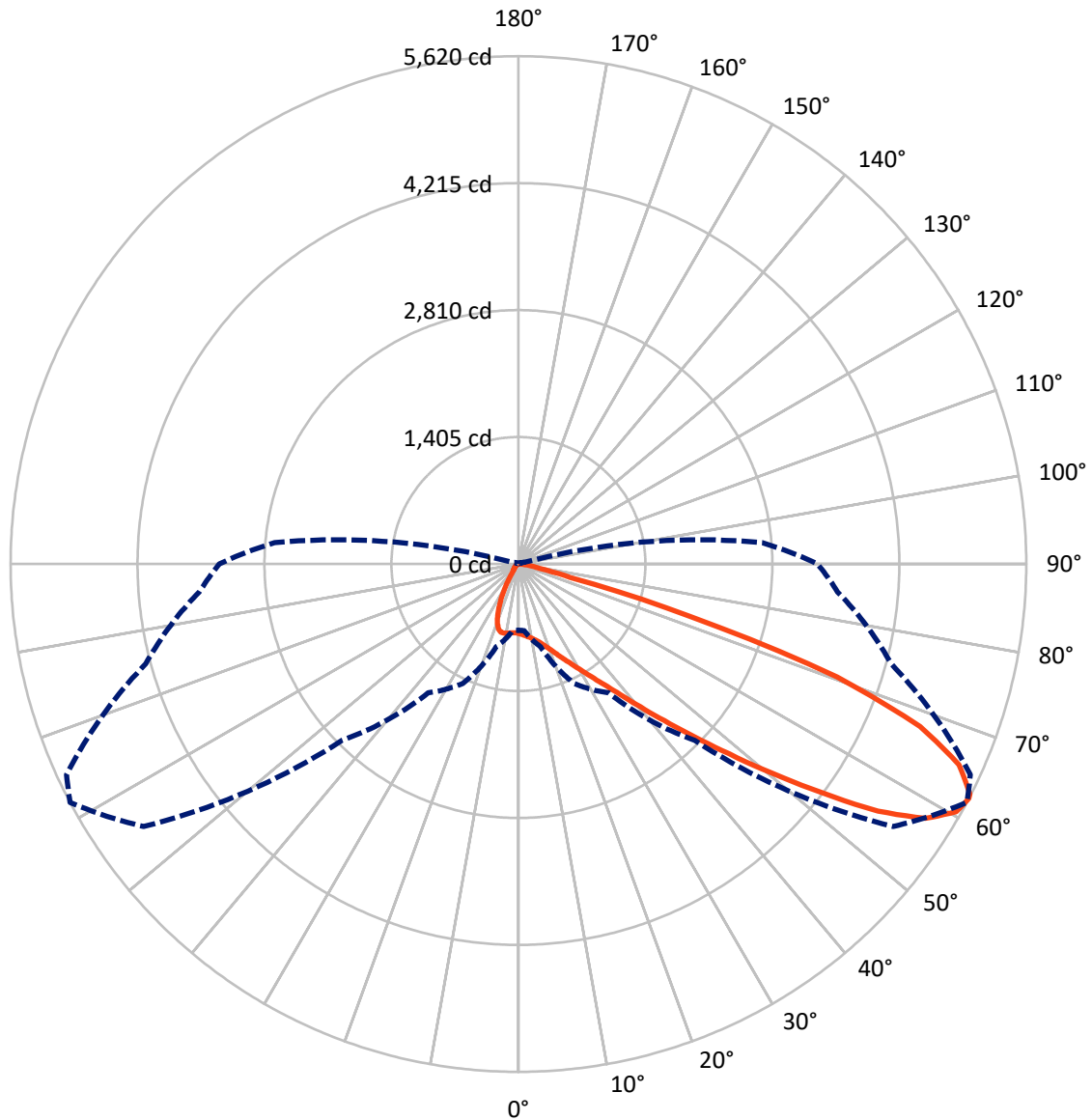
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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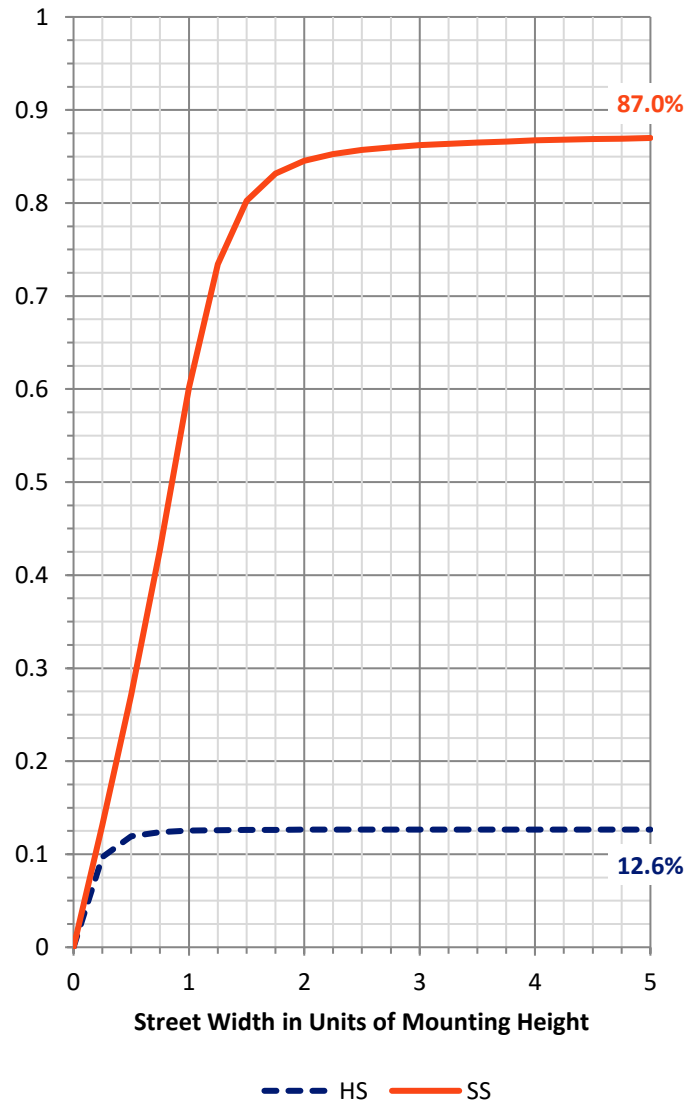
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	817.4	0.0	817.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5575.1	0.0	5575.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	6392.4	0.0	6392.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	1.2
10°-20°	206.9	3.2
20°-30°	347.6	5.4
30°-40°	666.2	10.4
40°-50°	1360.8	21.3
50°-60°	1800.8	28.2
60°-70°	1398.9	21.9
70°-80°	504.9	7.9
80°-90°	32.2	0.5
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°	6392.4	100.0
0°-180°	6392.4	100.0

Coefficient of Utilization



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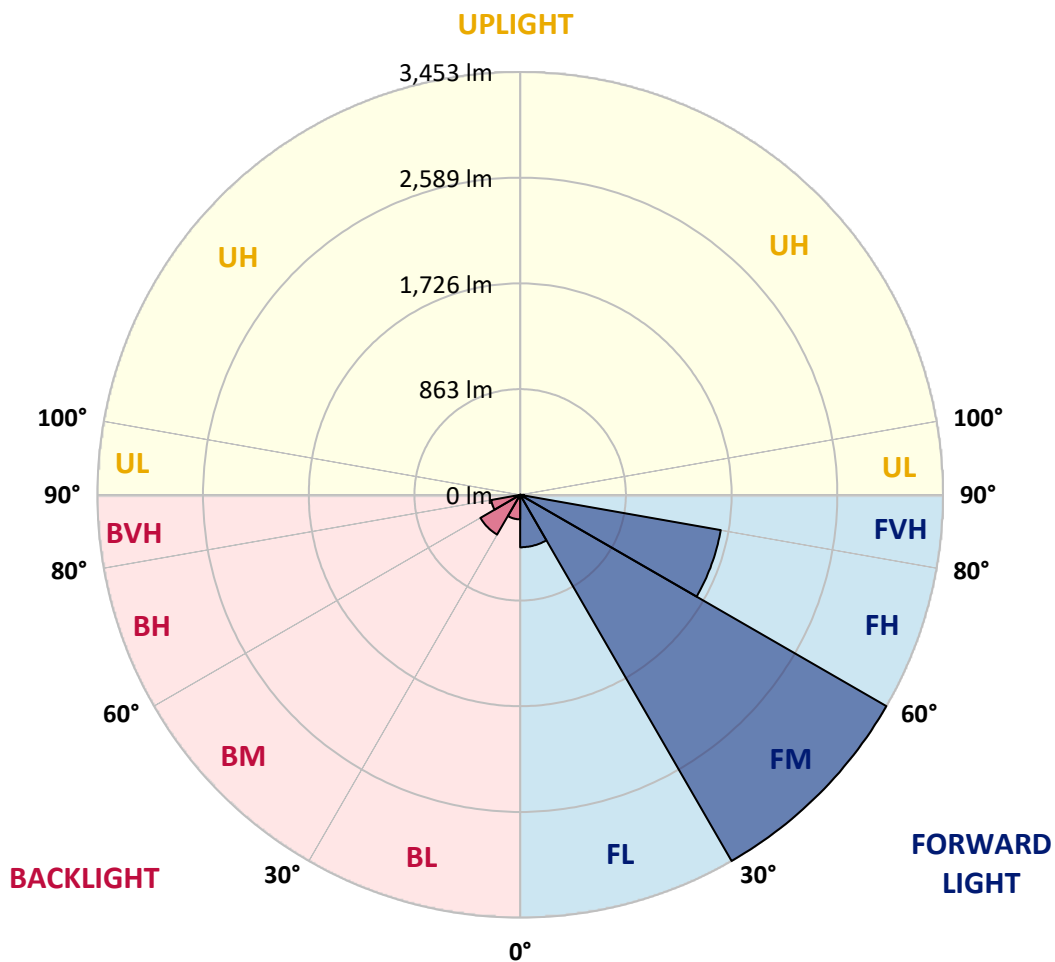
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	428.6	6.7			
FM (30°-60°)	3452.6	54.0			
FH (60°-80°)	1663.2	26.0			G1/1800
FVH (80°-90°)	30.8	0.5			G1/100
BL (0°-30°)	200.0	3.1	B1/500		
BM (30°-60°)	375.2	5.9	B1/1000		
BH (60°-80°)	240.7	3.8	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			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°	62°	65°	75°	85°
0°	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1
2.5°	790.4	788.9	787.4	785.7	785.7	784.2	782.7	779.5	776.3	773.1	771.6
5°	804.7	803.0	801.5	803.0	801.5	801.5	799.9	796.8	793.6	788.9	784.2
7.5°	815.6	814.1	812.5	814.1	815.6	817.2	818.8	815.6	814.1	807.7	803.0
10°	829.8	828.2	826.6	829.8	829.8	837.6	839.2	837.6	836.1	831.4	823.5
12.5°	850.2	851.8	851.8	854.9	858.1	867.5	870.6	865.9	865.9	859.6	850.2
15°	887.9	887.9	887.9	891.1	892.6	905.2	908.4	903.7	906.7	895.8	886.4
17.5°	924.0	925.7	928.7	935.1	935.1	946.0	952.4	952.4	958.6	944.5	931.9
20°	960.2	961.8	966.5	980.6	980.6	994.8	1005.8	1010.5	1016.8	1002.6	980.6
22.5°	999.5	999.5	1007.4	1029.4	1024.6	1052.9	1073.4	1081.3	1087.5	1068.7	1034.1
25°	1059.2	1052.9	1059.2	1079.6	1076.5	1115.8	1153.5	1161.4	1169.2	1147.2	1095.4
27.5°	1172.4	1162.9	1140.9	1142.5	1142.5	1188.1	1241.6	1252.5	1257.2	1238.4	1173.9
30°	1398.7	1398.7	1316.9	1261.9	1225.8	1266.6	1342.1	1360.9	1367.3	1338.9	1254.0
32.5°	1793.1	1793.1	1642.2	1502.4	1365.6	1365.6	1452.1	1486.7	1493.0	1460.0	1360.9
35°	2296.0	2292.8	2066.6	1874.9	1607.7	1507.1	1581.0	1639.1	1658.0	1614.0	1499.2
37.5°	2830.3	2809.9	2566.3	2346.3	1980.1	1733.4	1755.4	1832.4	1849.7	1813.6	1678.4
40°	3264.0	3240.5	3044.1	2860.2	2461.0	2094.9	2006.8	2077.6	2098.0	2047.7	1892.2
42.5°	3656.9	3598.8	3463.6	3331.6	3014.2	2720.3	2341.5	2369.9	2391.9	2338.5	2132.5
45°	3941.4	3851.8	3782.7	3741.9	3573.7	3407.0	2775.4	2718.8	2726.6	2660.6	2395.0
47.5°	3949.3	3886.4	3892.6	3999.5	4068.7	4062.4	3339.5	3138.3	3108.4	2998.5	2674.7
50°	3572.0	3608.3	3722.9	4027.9	4401.9	4628.1	4010.6	3635.0	3545.3	3347.4	2953.0
52.5°	2943.4	3000.0	3215.3	3729.3	4450.6	5000.6	4706.7	4202.3	4042.0	3693.1	3166.6
55°	2305.4	2308.6	2534.9	3058.2	4125.3	5068.2	5263.1	4826.2	4581.0	3955.5	3308.1
57.5°	1585.7	1672.1	1959.7	2311.8	3391.4	4731.9	5472.1	5310.2	4994.4	4117.4	3407.0
60°	1038.8	1043.5	1378.2	1785.3	2308.6	3850.3	5344.8	5566.4	5329.1	4213.2	3474.7
62°	732.3	740.2	947.7	1458.4	1739.7	2759.6	5063.5	5619.8	5517.7	4269.9	3545.3
62.5°	678.9	685.2	859.6	1376.7	1634.4	2475.1	4962.8	5607.2	5545.9	4288.7	3570.5
65°	498.2	498.2	562.6	946.0	1197.5	1337.4	4205.5	5357.4	5508.2	4439.6	3664.8
67.5°	385.0	388.2	410.2	583.1	903.7	810.9	2684.2	4794.8	5115.4	4662.7	3718.2
70°	331.6	330.0	345.8	386.6	652.2	539.0	1181.8	3741.9	4284.0	4606.1	3669.5
72.5°	245.2	246.7	282.8	339.4	454.2	350.5	534.3	1986.4	2778.4	3605.1	3144.7
75°	157.1	158.8	199.6	267.2	326.8	229.4	308.0	592.5	1137.8	1998.9	1923.6
77.5°	105.3	108.4	130.4	187.0	286.0	143.0	193.3	248.3	342.6	749.6	689.9
80°	70.7	70.7	83.3	125.7	180.8	119.5	103.7	165.0	177.6	232.6	116.3
82.5°	47.2	47.2	55.0	83.3	117.8	106.9	62.9	89.6	103.7	116.3	40.8
85°	28.3	28.3	37.7	51.9	77.0	59.7	40.8	50.3	53.4	73.9	22.0
87.5°	17.3	15.8	25.2	36.1	40.8	36.1	26.7	26.7	28.3	40.8	11.0
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°	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1	770.1
2.5°	768.4	766.9	765.4	762.2	757.5	754.3	751.2	748.1	744.9	744.9	749.6
5°	782.7	778.0	771.6	765.4	755.9	749.6	744.9	738.6	735.5	735.5	737.0
7.5°	799.9	795.2	784.2	773.1	759.0	748.1	737.0	722.9	711.9	707.2	711.9
10°	818.8	812.5	796.8	779.5	763.7	735.5	699.3	655.3	617.7	600.4	608.1
12.5°	842.3	834.5	815.6	792.1	755.9	686.8	597.2	495.0	430.6	400.7	407.0
15°	876.9	865.9	839.2	803.0	722.9	573.6	427.5	309.5	249.9	224.7	227.9
17.5°	917.8	903.7	867.5	799.9	638.0	413.3	254.6	180.8	155.6	149.2	149.2
20°	961.8	943.0	895.8	776.3	509.2	259.3	158.8	138.3	128.9	124.2	124.2
22.5°	1007.4	982.2	919.3	721.3	363.0	161.8	130.4	116.3	105.3	100.6	100.6
25°	1062.3	1029.4	943.0	625.4	231.0	130.4	111.6	97.4	86.4	80.1	81.7
27.5°	1126.8	1084.3	963.3	506.1	149.2	113.1	92.7	78.6	69.2	66.0	66.0
30°	1194.4	1144.1	968.0	378.7	121.0	97.4	77.0	64.4	58.1	55.0	55.0
32.5°	1287.1	1221.1	953.9	251.4	102.2	81.7	64.4	53.4	48.7	47.2	47.2
35°	1409.6	1321.7	921.0	155.6	86.4	67.6	53.4	47.2	42.5	40.8	40.8
37.5°	1565.2	1461.5	862.8	106.9	73.9	55.0	45.6	40.8	37.7	36.1	36.1
40°	1772.7	1631.3	787.4	92.7	62.9	47.2	39.3	36.1	33.0	33.0	33.0
42.5°	1992.7	1837.1	689.9	81.7	53.4	40.8	34.6	31.4	29.9	28.3	28.3
45°	2233.1	2047.7	568.9	72.3	45.6	36.1	31.4	26.7	25.2	25.2	25.2
47.5°	2472.1	2264.6	436.9	62.9	39.3	31.4	26.7	23.5	22.0	20.5	20.5
50°	2717.2	2461.0	320.6	55.0	34.6	28.3	23.5	20.5	17.3	15.8	15.8
52.5°	2894.7	2578.9	234.2	47.2	29.9	23.5	18.8	15.8	12.6	11.0	11.0
55°	3025.2	2651.2	171.3	39.3	26.7	20.5	15.8	12.6	9.4	9.4	7.9
57.5°	3127.4	2685.8	128.9	34.6	23.5	17.3	12.6	9.4	7.9	6.2	6.2
60°	3205.9	2687.3	95.9	28.3	20.5	14.1	9.4	6.2	4.7	4.7	4.7
62°	3309.7	2707.8	78.6	23.5	18.8	12.6	7.9	4.7	3.2	1.5	1.5
62.5°	3339.5	2715.6	75.4	23.5	17.3	11.0	6.2	4.7	3.2	1.5	1.5
65°	3477.8	2729.7	58.1	18.8	14.1	9.4	4.7	3.2	0.0	0.0	0.0
67.5°	3603.5	2707.8	42.5	14.1	11.0	6.2	4.7	1.5	0.0	0.0	0.0
70°	3591.0	2556.9	29.9	9.4	7.9	4.7	3.2	0.0	0.0	0.0	0.0
72.5°	2959.2	1914.1	20.5	7.9	4.7	3.2	1.5	0.0	0.0	0.0	0.0
75°	1786.8	837.6	14.1	4.7	4.7	3.2	1.5	0.0	0.0	0.0	0.0
77.5°	586.2	303.3	9.4	3.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0
80°	95.9	50.3	4.7	3.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0
82.5°	29.9	12.6	3.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0	0.0
85°	11.0	4.7	3.2	3.2	1.5	1.5	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	3.2	3.2	3.2	1.5	1.5	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)