

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: P214802

Luminaire Tested: **ARCH-AF24-70-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-70-D-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6218.5 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

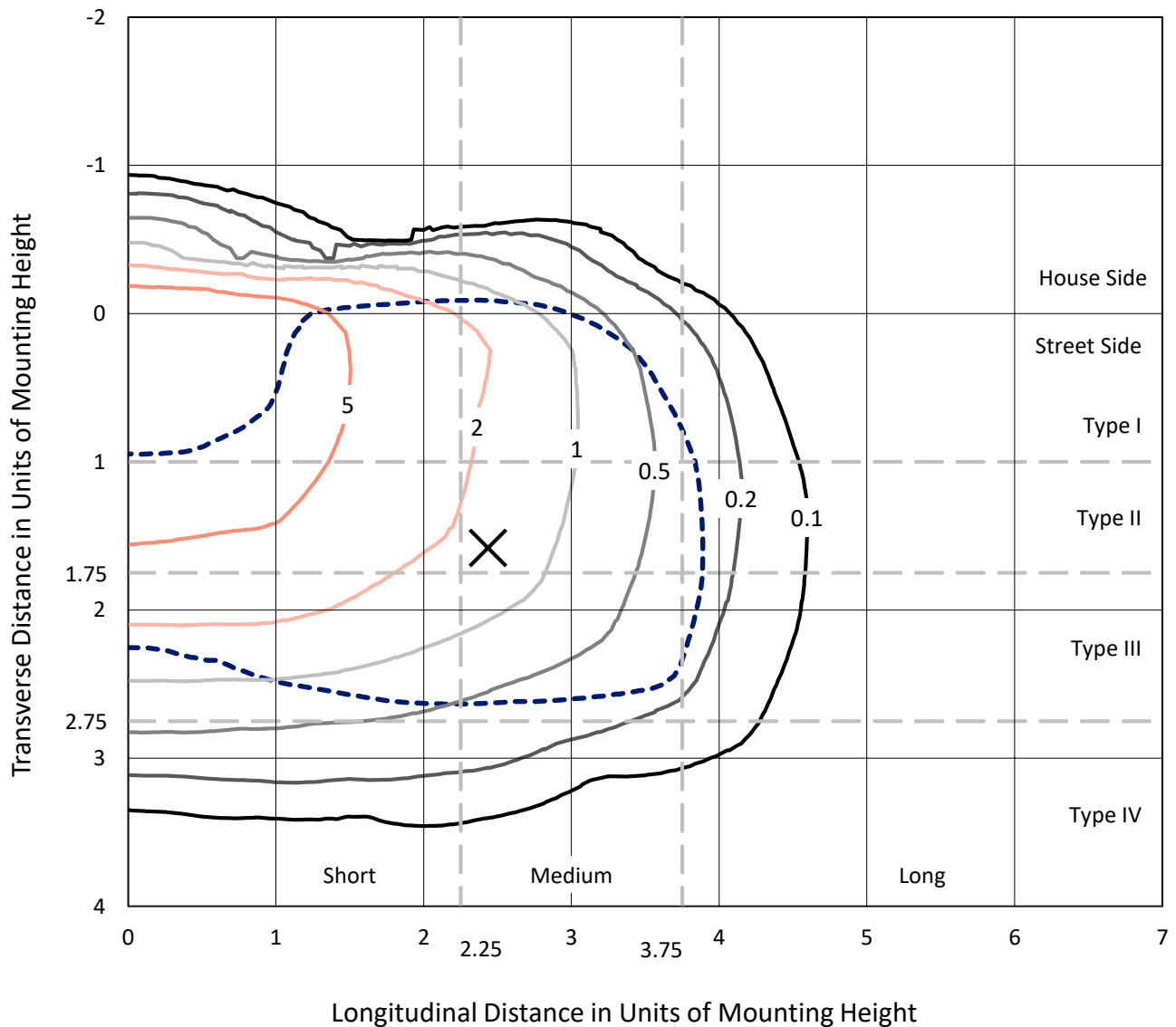
Input Watts (W): 74
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

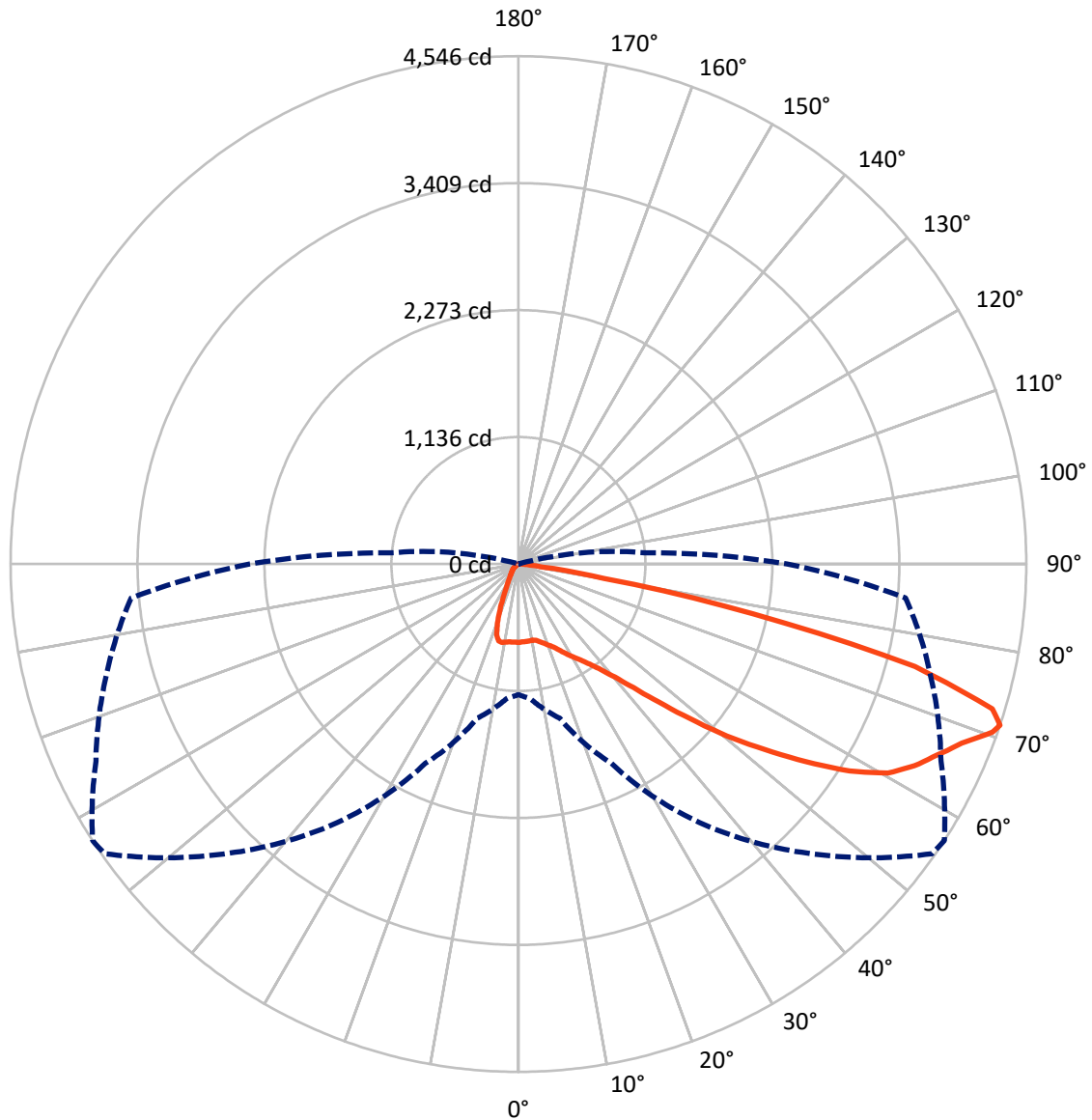


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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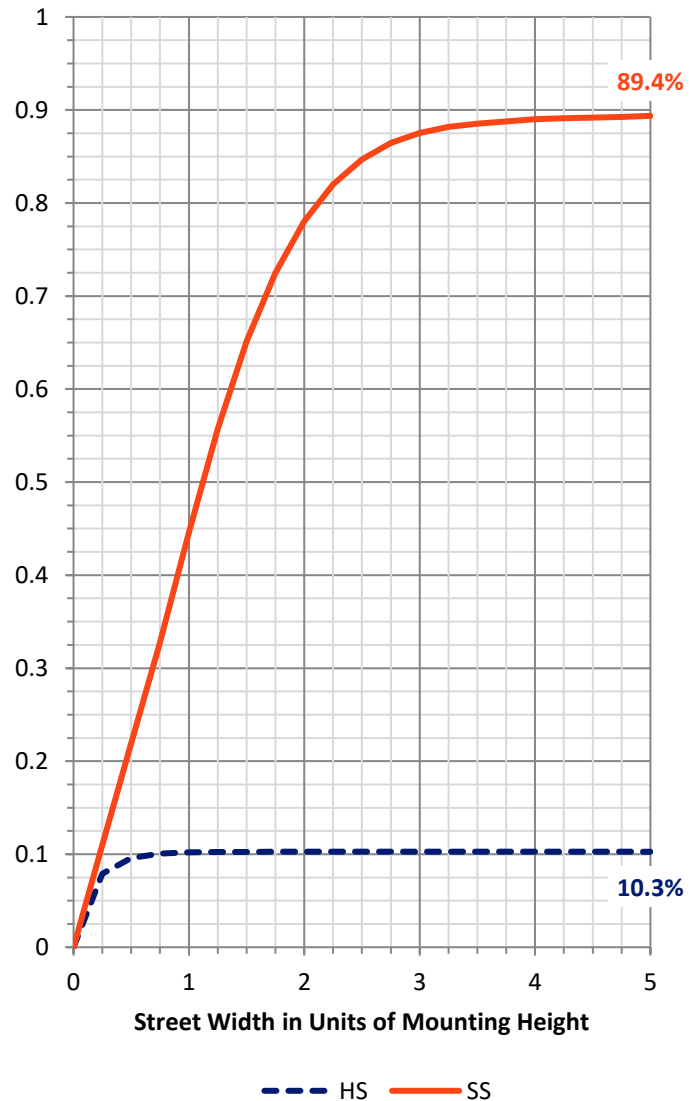
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	644.4	0.0	644.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5574.1	0.0	5574.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	6218.5	0.0	6218.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	1.1
10°-20°	176.5	2.8
20°-30°	275.3	4.4
30°-40°	465.3	7.5
40°-50°	903.7	14.5
50°-60°	1517.6	24.4
60°-70°	1811.1	29.1
70°-80°	954.5	15.3
80°-90°	48.5	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°	6218.5	100.0
0°-180°	6218.5	100.0

Coefficient of Utilization



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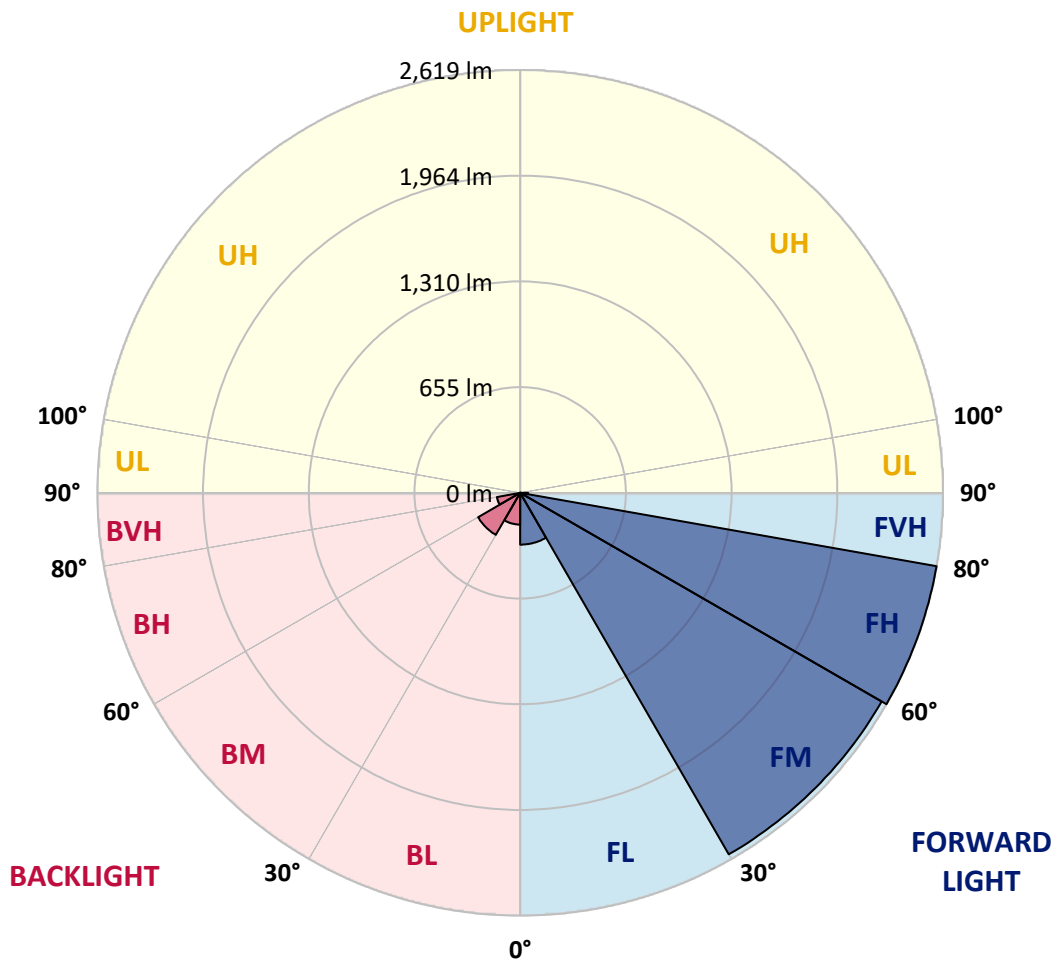
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.0	5.2			
FM	(30°-60°)	2585.7	41.6			
FH	(60°-80°)	2619.3	42.1			G2/5000
FVH	(80°-90°)	48.0	0.8			G1/100
BL	(0°-30°)	196.7	3.2	B1/500		
BM	(30°-60°)	300.9	4.8	B1/1000		
BH	(60°-80°)	146.3	2.4	B1/500		G1/500
BVH	(80°-90°)	0.5	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-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8
2.5°	692.6	692.6	692.6	694.1	695.5	695.5	698.5	697.0	697.0	697.0	699.9
5°	673.8	675.2	676.7	679.6	685.4	689.8	697.0	697.0	698.5	701.3	702.8
7.5°	647.7	649.2	653.6	659.3	671.0	681.1	692.6	695.5	699.9	707.2	710.0
10°	631.8	634.6	640.5	647.7	660.7	673.8	688.3	692.6	705.7	718.7	726.0
12.5°	627.5	628.9	634.6	646.3	662.3	678.1	697.0	701.3	720.2	740.4	752.1
15°	634.6	636.2	639.0	652.0	671.0	691.2	715.9	721.6	744.8	768.0	782.5
17.5°	647.7	647.7	650.6	662.3	682.5	705.7	737.5	746.2	772.3	798.4	814.4
20°	656.4	656.4	660.7	672.4	695.5	726.0	763.6	775.2	804.2	833.2	847.7
22.5°	665.1	666.6	671.0	683.9	710.0	752.1	795.5	807.1	840.5	870.8	885.4
25°	689.8	688.3	689.8	701.3	731.7	783.9	839.0	853.4	888.2	921.6	928.8
27.5°	757.8	754.9	736.1	728.9	752.1	817.2	894.1	908.6	949.1	982.4	982.4
30°	914.3	908.6	862.1	802.8	783.9	847.7	946.2	966.5	1018.7	1047.7	1039.0
32.5°	1112.9	1099.8	1040.4	939.0	863.7	888.2	1001.3	1024.5	1091.2	1115.7	1096.9
35°	1330.2	1328.8	1254.9	1124.4	1017.2	972.3	1072.3	1099.8	1183.9	1205.6	1175.2
37.5°	1560.6	1566.4	1517.1	1337.5	1211.4	1110.0	1166.5	1198.4	1301.2	1327.3	1298.3
40°	1817.1	1815.6	1796.8	1583.8	1444.7	1305.6	1302.7	1331.7	1456.3	1496.9	1456.3
42.5°	2141.6	2138.8	2070.7	1879.4	1727.3	1560.6	1501.2	1511.3	1650.4	1717.1	1657.7
45°	2472.1	2451.8	2373.6	2208.3	2073.6	1876.5	1763.5	1763.5	1882.3	1973.6	1880.9
47.5°	2656.1	2635.8	2603.9	2512.7	2472.1	2251.8	2085.2	2064.9	2157.6	2250.4	2120.0
50°	2898.1	2898.1	2818.4	2783.7	2853.2	2698.1	2440.1	2419.9	2464.8	2538.8	2367.7
52.5°	3089.4	3054.6	2998.1	3028.5	3227.0	3156.0	2795.2	2756.0	2790.8	2809.7	2583.7
55°	3169.1	3135.8	3131.4	3243.0	3550.2	3451.6	3158.9	3124.1	3121.2	3028.5	2772.0
57.5°	3185.0	3156.0	3211.0	3406.7	3864.6	3693.6	3521.2	3495.1	3414.0	3182.1	2964.7
60°	3050.2	3064.8	3198.1	3496.5	4050.1	3903.7	3827.0	3799.4	3612.4	3312.5	3179.2
62.5°	2773.4	2808.2	3057.5	3505.2	3981.9	3989.2	3996.5	3977.6	3766.1	3431.4	3395.1
65°	2446.0	2456.1	2756.0	3384.9	3863.2	3963.1	4121.1	4119.6	3883.4	3564.7	3638.5
67.5°	2015.6	2033.0	2292.4	2979.2	3625.5	3951.6	4284.8	4280.4	4016.7	3716.8	3783.5
70°	1499.7	1521.5	1731.7	2317.0	3095.1	3806.6	4499.2	4502.2	4157.3	3832.7	3683.4
71°	1169.3	1208.5	1428.8	1967.9	2824.2	3660.3	4519.6	4545.7	4173.2	3816.8	3477.7
72.5°	573.8	620.2	896.9	1385.3	2324.2	3332.8	4386.2	4436.9	4073.3	3618.3	2973.4
75°	149.2	157.9	268.1	566.6	1246.2	2208.3	3537.2	3666.1	3329.9	2754.6	1817.1
77.5°	94.2	97.1	126.0	220.2	466.6	839.0	2077.9	2141.6	1902.6	1395.4	640.5
80°	66.7	68.1	79.7	142.0	272.4	244.9	747.7	775.2	688.3	369.5	114.5
82.5°	40.6	40.6	58.0	91.2	168.1	133.3	197.0	210.1	185.5	102.9	37.6
85°	23.2	24.7	36.2	62.3	79.7	65.2	73.9	78.3	79.7	68.1	16.0
87.5°	18.8	20.3	31.9	52.2	43.5	31.9	31.9	33.3	34.8	40.6	7.3
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°	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8	702.8
2.5°	699.9	699.9	701.3	699.9	699.9	699.9	701.3	701.3	701.3	704.2	705.7
5°	702.8	702.8	702.8	701.3	699.9	699.9	702.8	704.2	704.2	708.6	708.6
7.5°	710.0	710.0	707.2	704.2	701.3	697.0	698.5	699.9	698.5	699.9	699.9
10°	726.0	726.0	721.6	715.9	707.2	694.1	676.7	655.0	634.6	627.5	624.5
12.5°	752.1	750.6	741.9	731.7	712.9	668.0	602.8	526.0	462.3	444.9	439.1
15°	781.0	778.2	768.0	750.6	699.9	581.0	444.9	346.4	285.5	271.0	268.1
17.5°	811.5	807.1	792.6	757.8	640.5	431.8	286.9	217.4	184.0	181.2	182.6
20°	843.3	837.6	817.2	743.4	517.3	288.4	185.5	168.1	165.2	165.2	166.6
22.5°	879.5	872.4	844.8	691.2	376.8	191.3	159.4	157.9	156.5	155.1	155.1
25°	921.6	912.9	870.8	597.0	259.4	156.5	152.1	147.8	145.0	142.0	140.6
27.5°	972.3	960.8	891.2	481.1	178.2	146.4	143.4	136.3	130.4	124.6	124.6
30°	1023.1	1008.5	885.4	362.2	145.0	136.3	130.4	121.7	113.0	107.2	105.8
32.5°	1076.7	1062.1	847.7	243.5	131.9	124.6	117.3	104.3	94.2	87.0	85.5
35°	1156.3	1144.8	773.8	160.8	118.9	110.2	99.9	87.0	73.9	66.7	65.2
37.5°	1275.2	1260.7	682.5	123.2	104.3	91.2	82.6	68.1	55.0	47.8	46.3
40°	1434.6	1391.1	573.8	108.6	91.2	75.4	63.7	49.3	39.1	34.8	34.8
42.5°	1620.0	1517.1	456.4	98.5	81.1	62.3	46.3	33.3	27.5	26.1	26.1
45°	1817.1	1634.6	339.1	91.2	71.0	49.3	33.3	23.2	20.3	18.8	18.8
47.5°	2019.9	1730.1	236.2	82.6	59.4	37.6	23.2	17.4	14.5	13.0	13.0
50°	2209.8	1792.5	166.6	73.9	50.7	27.5	17.4	13.0	10.1	10.1	10.1
52.5°	2341.6	1786.7	120.3	63.7	39.1	18.8	11.6	8.7	8.7	8.7	8.7
55°	2457.5	1764.9	94.2	55.0	30.4	13.0	8.7	7.3	7.3	5.8	5.8
57.5°	2556.1	1730.1	79.7	44.9	21.7	10.1	5.8	5.8	4.3	4.3	4.3
60°	2640.1	1686.6	66.7	37.6	14.5	7.3	4.3	2.9	2.9	1.4	2.9
62.5°	2754.6	1659.1	58.0	28.9	10.1	4.3	2.9	1.4	1.4	0.0	0.0
65°	2838.7	1607.0	49.3	20.3	5.8	2.9	1.4	1.4	0.0	0.0	0.0
67.5°	2841.6	1512.8	36.2	11.6	4.3	2.9	1.4	0.0	0.0	0.0	0.0
70°	2612.6	1289.6	23.2	5.8	2.9	1.4	1.4	0.0	0.0	0.0	0.0
71°	2402.5	1141.8	18.8	4.3	2.9	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	1979.4	839.0	14.5	4.3	1.4	1.4	0.0	0.0	0.0	0.0	0.0
75°	1091.2	304.3	7.3	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	349.2	92.8	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	59.4	14.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.3	5.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.4	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)