

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: P265982

Luminaire Tested: **ARCH-AF24-90-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265982
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-AF24-90-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA 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: 6117.6 lumens
Efficiency: N/A
Efficacy: 65.1 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): 94
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

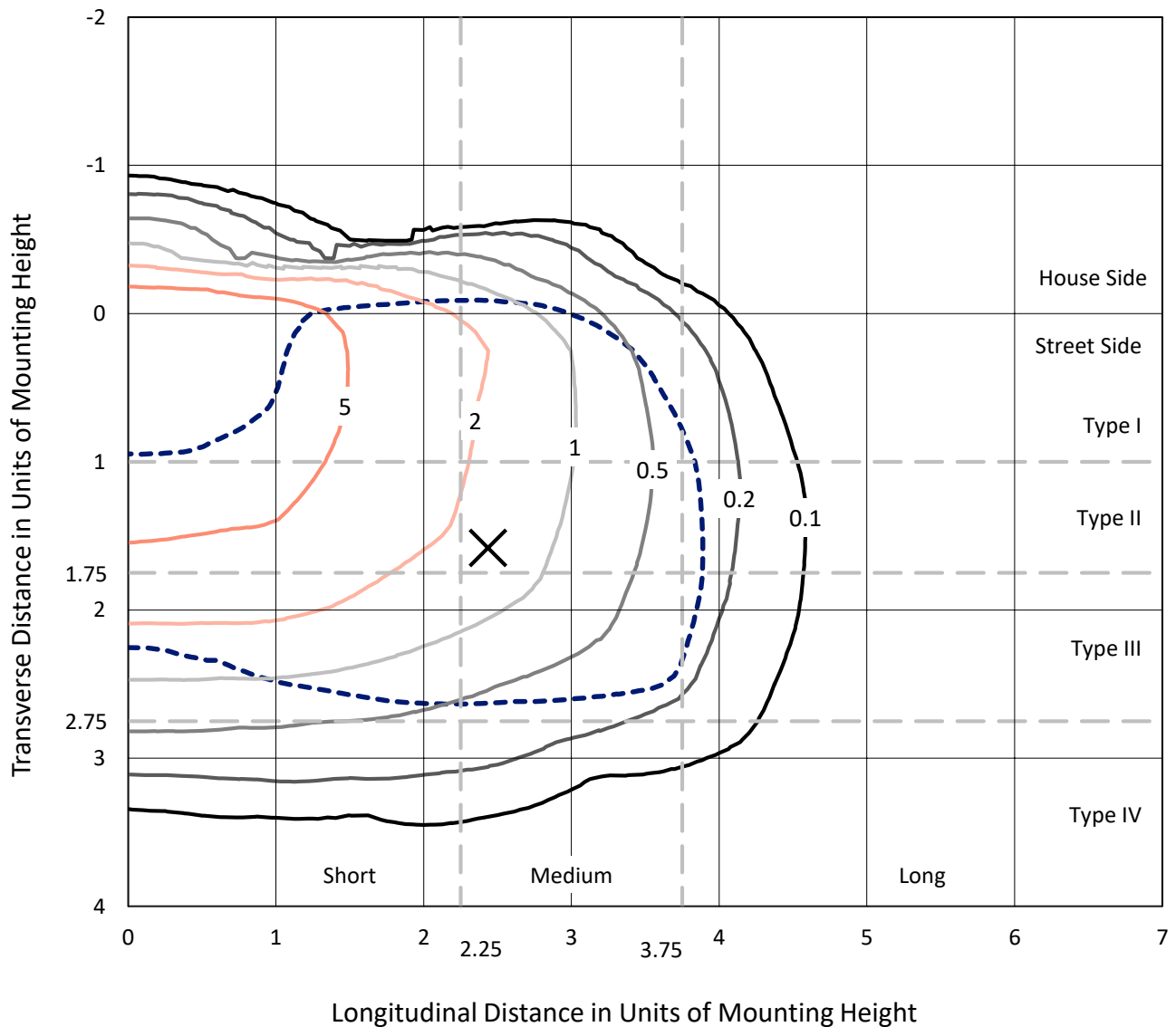


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

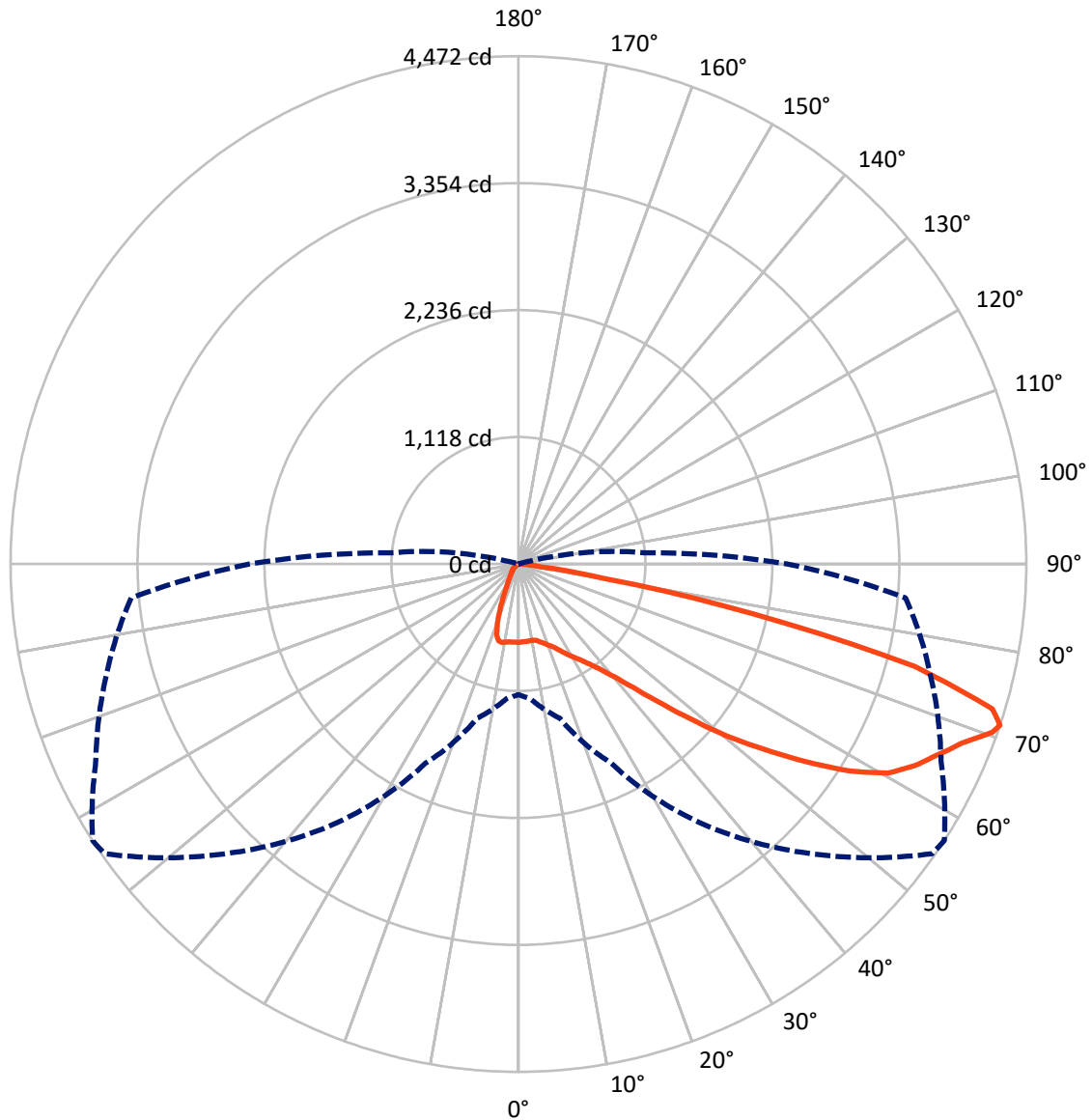


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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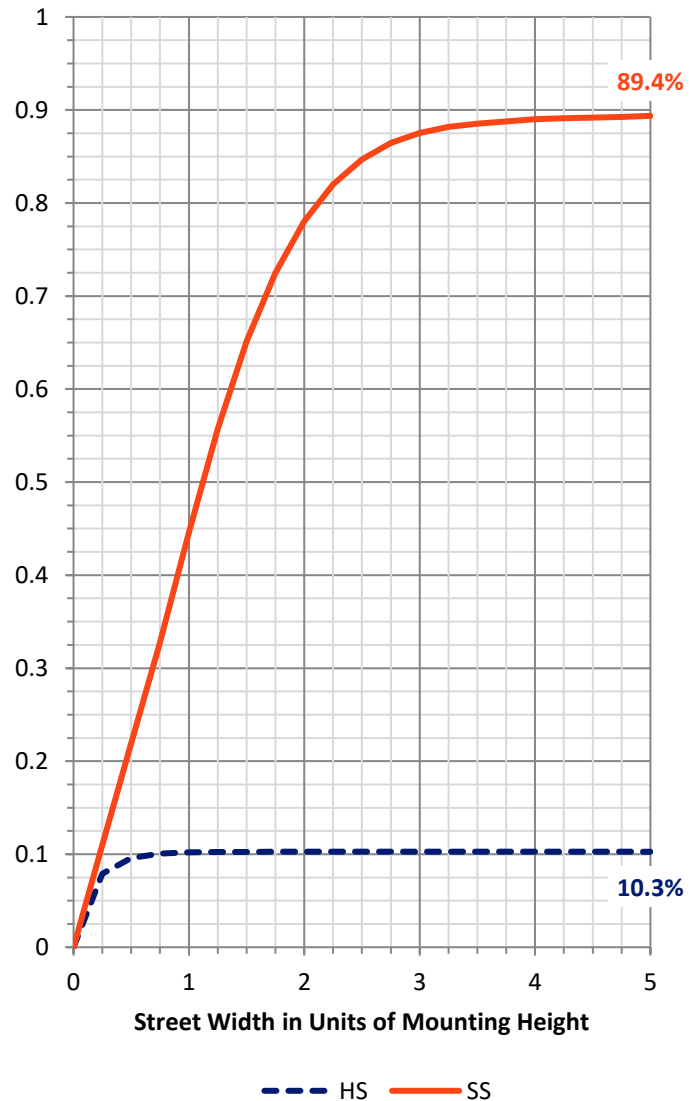
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	634.0	0.0	634.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5483.6	0.0	5483.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	6117.6	0.0	6117.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.1
10°-20°	173.6	2.8
20°-30°	270.8	4.4
30°-40°	457.7	7.5
40°-50°	889.0	14.5
50°-60°	1493.0	24.4
60°-70°	1781.7	29.1
70°-80°	939.0	15.3
80°-90°	47.7	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°	6117.6	100.0
0°-180°	6117.6	100.0



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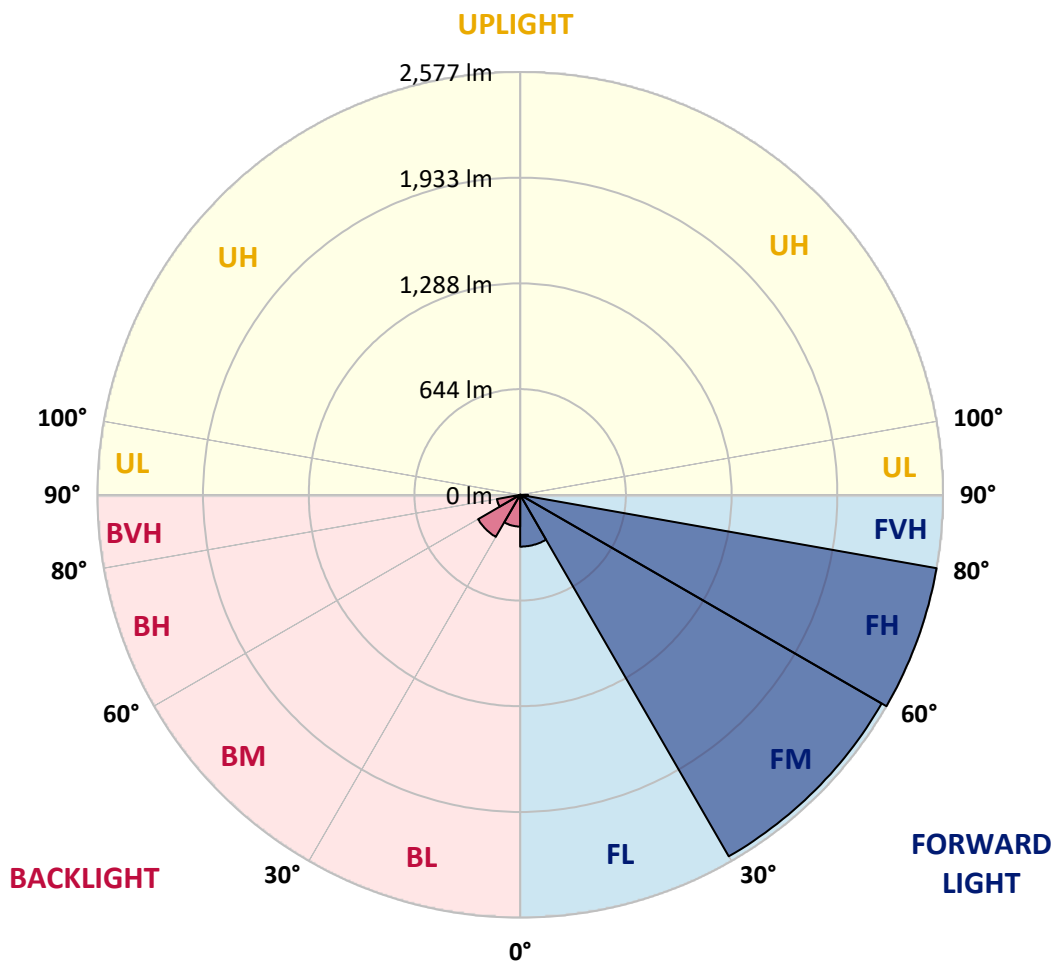
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	315.8	5.2			
FM	(30°-60°)	2543.7	41.6			
FH	(60°-80°)	2576.8	42.1			G2/5000
FVH	(80°-90°)	47.3	0.8			G1/100
BL	(0°-30°)	193.5	3.2	B1/500		
BM	(30°-60°)	296.0	4.8	B1/1000		
BH	(60°-80°)	144.0	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°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	681.5	681.5	681.5	682.8	684.2	684.2	687.2	685.6	685.6	685.6	688.6
5°	662.9	664.2	665.7	668.6	674.3	678.6	685.6	685.6	687.2	690.0	691.3
7.5°	637.2	638.6	642.8	648.7	660.1	670.0	681.5	684.2	688.6	695.6	698.5
10°	621.5	624.4	630.2	637.2	650.1	662.9	677.1	681.5	694.2	707.1	714.2
12.5°	617.2	618.8	624.4	635.8	651.5	667.1	685.6	690.0	708.6	728.4	739.8
15°	624.4	625.8	628.6	641.5	660.1	679.9	704.2	709.9	732.7	755.6	769.8
17.5°	637.2	637.2	640.0	651.5	671.5	694.2	725.7	734.2	759.7	785.5	801.2
20°	645.7	645.7	650.1	661.4	684.2	714.2	751.3	762.7	791.1	819.7	833.9
22.5°	654.3	655.8	660.1	672.8	698.5	739.8	782.7	794.0	826.8	856.8	870.9
25°	678.6	677.1	678.6	690.0	719.9	771.3	825.5	839.6	873.8	906.6	913.8
27.5°	745.6	742.7	724.2	717.0	739.8	804.1	879.5	893.9	933.7	966.4	966.4
30°	899.6	893.9	848.2	789.7	771.3	833.9	930.9	950.9	1002.1	1030.6	1022.1
32.5°	1094.9	1082.0	1023.4	923.7	849.5	873.8	985.0	1007.9	1073.5	1097.6	1079.1
35°	1308.7	1307.3	1234.5	1106.3	1000.7	956.5	1054.9	1082.0	1164.7	1186.0	1156.1
37.5°	1535.4	1541.0	1492.5	1315.7	1191.7	1092.0	1147.6	1178.9	1280.2	1305.7	1277.3
40°	1787.5	1786.2	1767.7	1558.1	1421.3	1284.3	1281.5	1310.1	1432.6	1472.5	1432.6
42.5°	2107.0	2104.1	2037.0	1848.9	1699.2	1535.4	1476.9	1486.9	1623.6	1689.3	1630.9
45°	2431.9	2411.9	2335.1	2172.6	2040.0	1846.0	1734.8	1734.8	1851.8	1941.5	1850.2
47.5°	2613.0	2593.0	2561.6	2471.9	2431.9	2215.3	2051.3	2031.3	2122.7	2213.9	2085.5
50°	2851.0	2851.0	2772.7	2738.5	2806.8	2654.3	2400.6	2380.6	2424.9	2497.5	2329.3
52.5°	3039.2	3005.0	2949.4	2979.4	3174.6	3104.8	2749.8	2711.4	2745.6	2764.1	2541.8
55°	3117.6	3084.8	3080.6	3190.3	3492.5	3395.7	3107.6	3073.5	3070.5	2979.4	2727.1
57.5°	3133.3	3104.8	3159.0	3351.3	3801.8	3633.6	3464.0	3438.4	3358.6	3130.5	2916.6
60°	3000.7	3015.0	3146.1	3439.8	3984.3	3840.3	3764.7	3737.7	3553.9	3258.7	3127.5
62.5°	2728.4	2762.6	3007.9	3448.4	3917.2	3924.4	3931.6	3913.0	3704.9	3375.7	3340.0
65°	2406.3	2416.4	2711.4	3330.0	3800.5	3898.9	4054.2	4052.8	3820.4	3506.9	3579.4
67.5°	1982.9	1999.9	2255.1	2930.9	3566.7	3887.3	4215.2	4211.0	3951.6	3656.6	3722.0
70°	1475.5	1496.8	1703.5	2279.4	3045.0	3744.9	4426.3	4429.2	4089.9	3770.5	3623.8
71°	1150.4	1188.8	1405.6	1935.8	2778.4	3600.9	4446.3	4471.9	4105.6	3754.8	3421.3
72.5°	564.6	610.0	882.3	1362.8	2286.5	3278.8	4315.1	4365.0	4007.2	3559.5	2925.2
75°	146.9	155.3	263.7	557.4	1225.9	2172.6	3479.8	3606.5	3275.8	2709.8	1787.5
77.5°	92.6	95.5	124.1	216.8	459.0	825.5	2044.3	2107.0	1871.7	1372.8	630.2
80°	65.5	67.1	78.4	139.6	268.1	240.9	735.5	762.7	677.1	363.5	112.6
82.5°	40.0	40.0	57.0	89.8	165.4	131.2	193.9	206.7	182.4	101.1	37.1
85°	22.7	24.3	35.7	61.4	78.4	64.1	72.8	77.0	78.4	67.1	15.7
87.5°	18.5	19.9	31.4	51.4	42.8	31.4	31.4	32.8	34.2	40.0	7.1
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°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	688.6	688.6	690.0	688.6	688.6	688.6	690.0	690.0	690.0	692.9	694.2
5°	691.3	691.3	691.3	690.0	688.6	688.6	691.3	692.9	692.9	697.1	697.1
7.5°	698.5	698.5	695.6	692.9	690.0	685.6	687.2	688.6	687.2	688.6	688.6
10°	714.2	714.2	709.9	704.2	695.6	682.8	665.7	644.4	624.4	617.2	614.4
12.5°	739.8	738.4	729.9	719.9	701.3	657.2	593.1	517.5	454.7	437.7	431.9
15°	768.4	765.4	755.6	738.4	688.6	571.6	437.7	340.6	280.8	266.5	263.7
17.5°	798.4	794.0	779.8	745.6	630.2	424.8	282.2	213.8	181.1	178.3	179.7
20°	829.7	823.9	804.1	731.3	508.9	283.7	182.4	165.4	162.6	162.6	163.9
22.5°	865.2	858.2	831.1	679.9	370.6	188.1	156.8	155.3	154.0	152.5	152.5
25°	906.6	898.0	856.8	587.3	255.2	154.0	149.7	145.3	142.6	139.6	138.2
27.5°	956.5	945.1	876.7	473.2	175.3	144.0	141.2	133.9	128.3	122.6	122.6
30°	1006.5	992.2	870.9	356.4	142.6	133.9	128.3	119.7	111.2	105.6	104.1
32.5°	1059.1	1044.9	833.9	239.5	129.7	122.6	115.4	102.6	92.6	85.5	84.1
35°	1137.6	1126.1	761.3	158.2	116.9	108.3	98.4	85.5	72.8	65.5	64.1
37.5°	1254.5	1240.2	671.5	121.2	102.6	89.8	81.2	67.1	54.2	47.0	45.6
40°	1411.2	1368.5	564.6	106.9	89.8	74.1	62.7	48.5	38.4	34.2	34.2
42.5°	1593.8	1492.5	449.1	96.9	79.8	61.4	45.6	32.8	27.0	25.6	25.6
45°	1787.5	1608.0	333.6	89.8	69.9	48.5	32.8	22.7	19.9	18.5	18.5
47.5°	1987.2	1702.1	232.3	81.2	58.4	37.1	22.7	17.1	14.3	12.8	12.8
50°	2173.9	1763.4	163.9	72.8	49.9	27.0	17.1	12.8	10.1	10.1	10.1
52.5°	2303.7	1757.7	118.3	62.7	38.4	18.5	11.4	8.5	8.5	8.5	8.5
55°	2417.7	1736.2	92.6	54.2	30.0	12.8	8.5	7.1	7.1	5.7	5.7
57.5°	2514.6	1702.1	78.4	44.1	21.4	10.1	5.7	5.7	4.3	4.3	4.3
60°	2597.3	1659.3	65.5	37.1	14.3	7.1	4.3	2.9	2.9	1.4	2.9
62.5°	2709.8	1632.2	57.0	28.4	10.1	4.3	2.9	1.4	1.4	0.0	0.0
65°	2792.7	1580.8	48.5	19.9	5.7	2.9	1.4	1.4	0.0	0.0	0.0
67.5°	2795.4	1488.2	35.7	11.4	4.3	2.9	1.4	0.0	0.0	0.0	0.0
70°	2570.2	1268.8	22.7	5.7	2.9	1.4	1.4	0.0	0.0	0.0	0.0
71°	2363.5	1123.3	18.5	4.3	2.9	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	1947.3	825.5	14.3	4.3	1.4	1.4	0.0	0.0	0.0	0.0	0.0
75°	1073.5	299.3	7.1	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	343.5	91.3	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	58.4	14.3	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.9	5.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.7	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)