

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: P265989

Luminaire Tested: **ARCH-AF24-100-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265989
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-AF24-100-D-U-T2U-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA 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: 5879.1 lumens
Efficiency: N/A
Efficacy: 61.2 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): 96
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

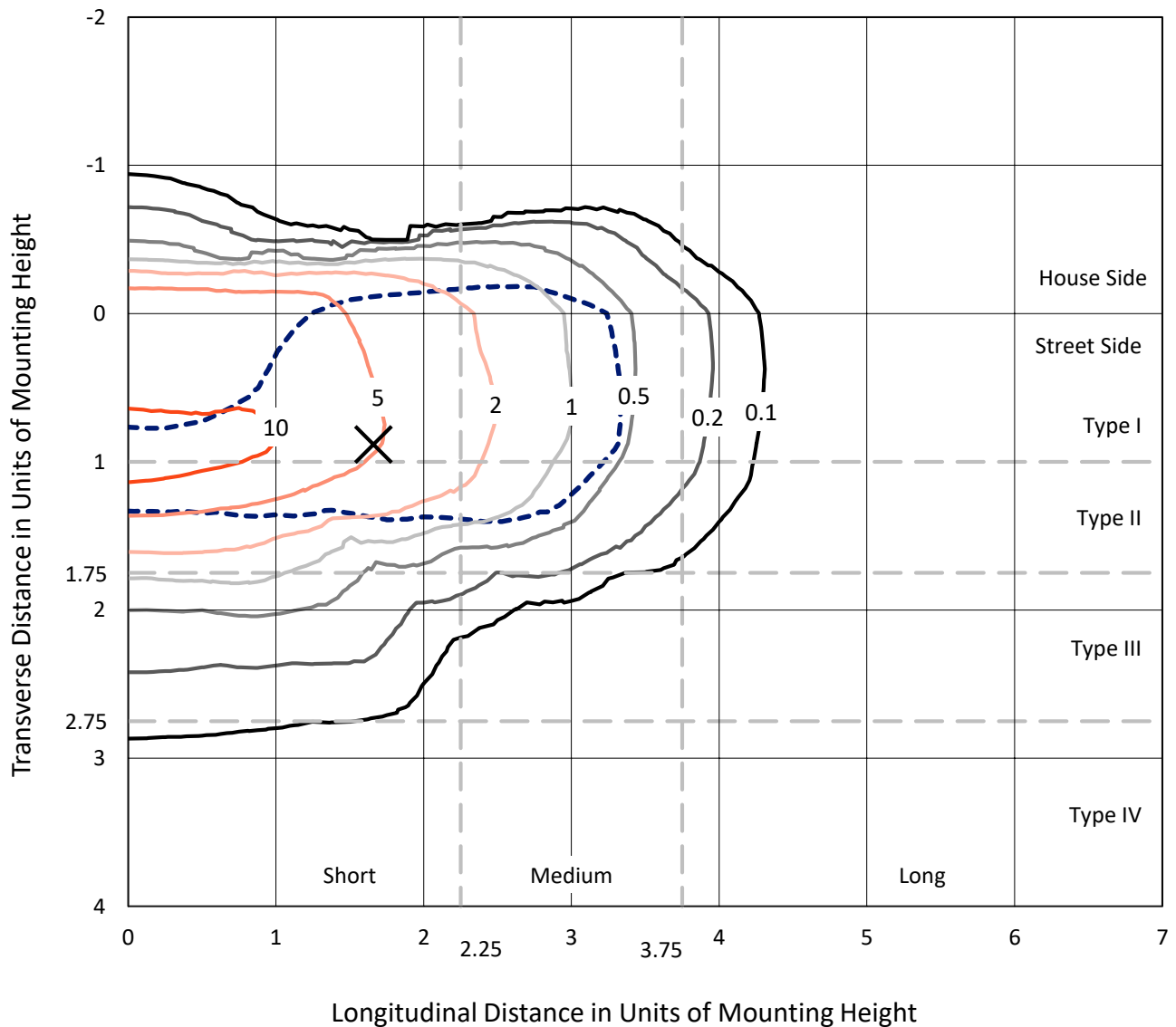


REPORT NUMBER: P265989

CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

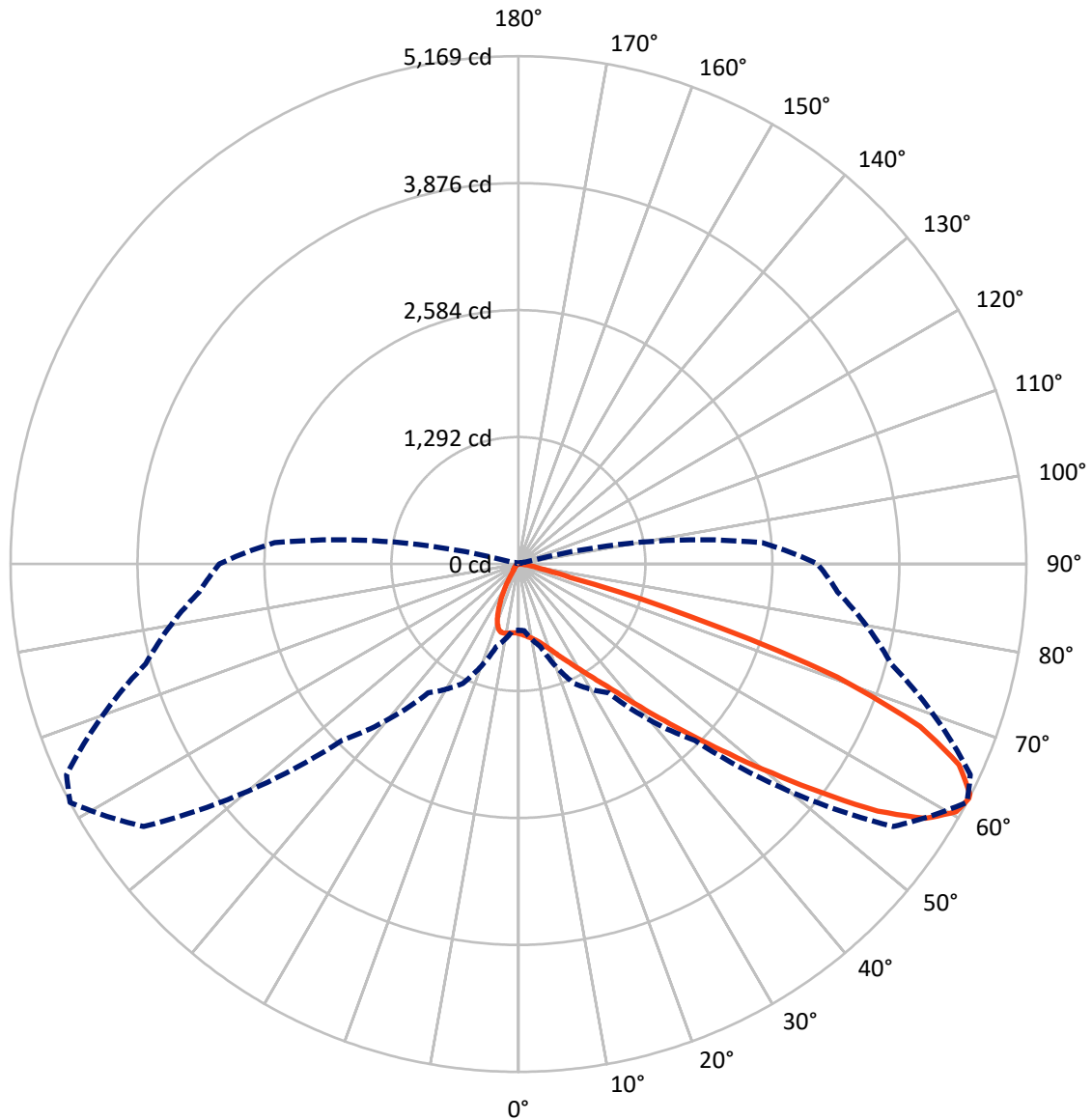


Based on 10 foot mounting height. Maximum calculated value = 13.5 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P265989

CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265989

CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

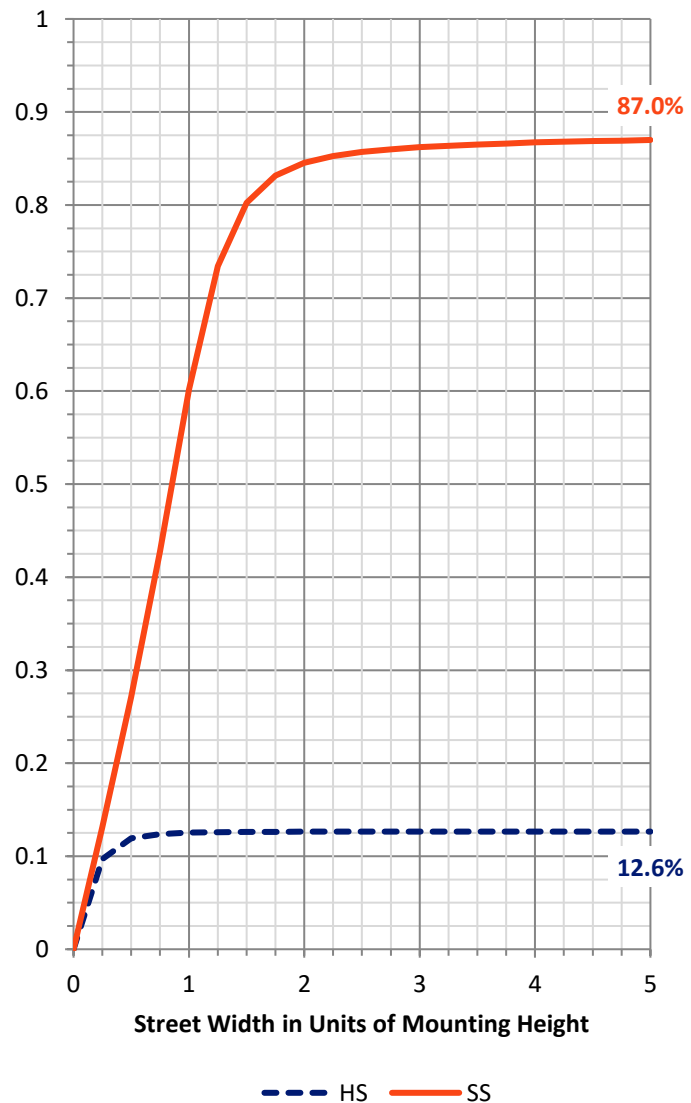
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	751.7	0.0	751.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5127.3	0.0	5127.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	5879.1	0.0	5879.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	1.2
10°-20°	190.3	3.2
20°-30°	319.6	5.4
30°-40°	612.7	10.4
40°-50°	1251.5	21.3
50°-60°	1656.2	28.2
60°-70°	1286.6	21.9
70°-80°	464.4	7.9
80°-90°	29.6	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°	5879.1	100.0
0°-180°	5879.1	100.0

Coefficient of Utilization



REPORT NUMBER: P265989

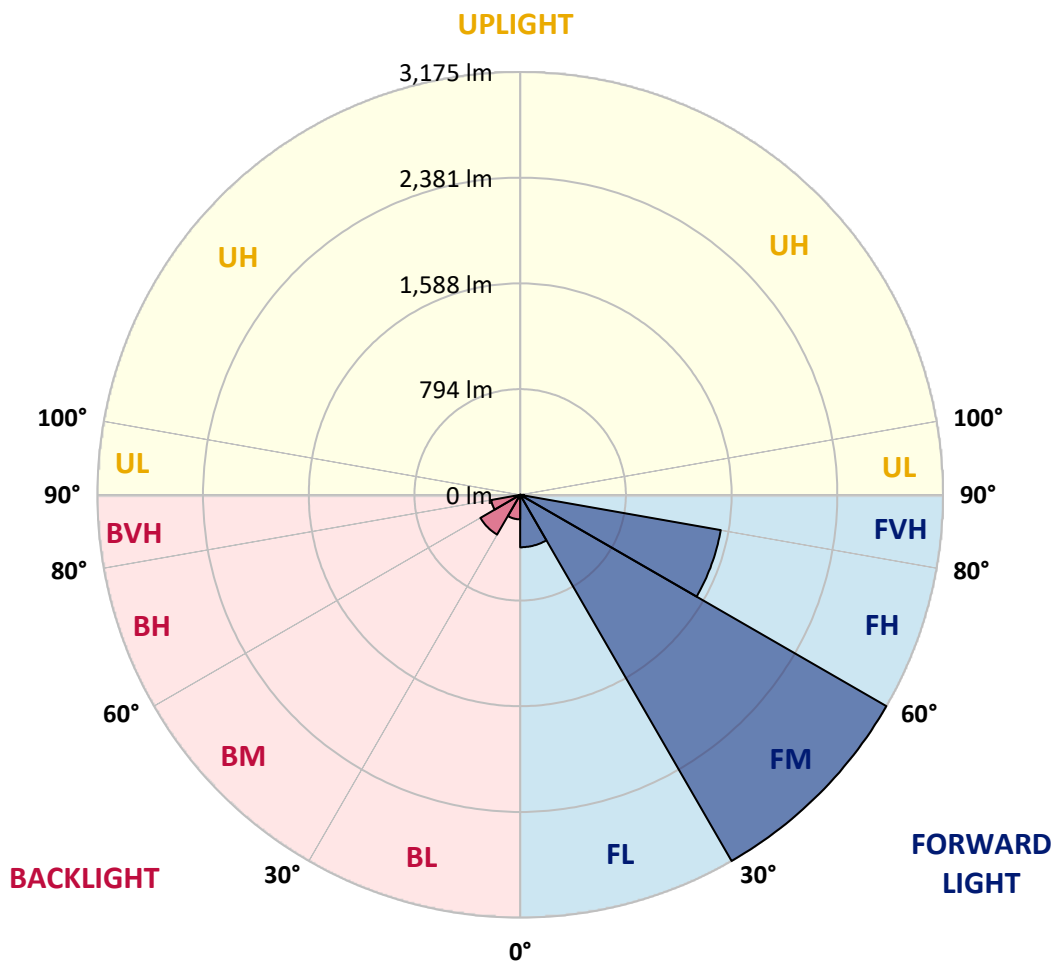
CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.1	6.7			
FM	(30°-60°)	3175.3	54.0			
FH	(60°-80°)	1529.6	26.0			G1/1800
FVH	(80°-90°)	28.3	0.5			G1/100
BL	(0°-30°)	184.0	3.1	B1/500		
BM	(30°-60°)	345.1	5.9	B1/1000		
BH	(60°-80°)	221.3	3.8	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P265989

CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3
2.5°	727.0	725.6	724.2	722.6	722.6	721.2	719.8	716.8	714.1	711.1	709.7
5°	740.1	738.5	737.1	738.5	737.1	737.1	735.7	732.7	730.0	725.6	721.2
7.5°	750.2	748.6	747.2	748.6	750.2	751.6	753.0	750.2	748.6	742.9	738.5
10°	763.1	761.8	760.2	763.1	763.1	770.3	771.9	770.3	768.9	764.5	757.4
12.5°	782.0	783.3	783.3	786.2	789.2	797.9	800.7	796.3	796.3	790.6	782.0
15°	816.6	816.6	816.6	819.6	821.0	832.5	835.5	831.0	833.9	823.8	815.1
17.5°	849.8	851.4	854.2	859.9	859.9	870.1	875.8	875.8	881.6	868.7	857.2
20°	883.2	884.6	888.9	901.9	901.9	915.0	925.1	929.3	935.1	922.1	901.9
22.5°	919.2	919.2	926.4	946.8	942.3	968.4	987.1	994.3	1000.2	982.8	951.0
25°	974.1	968.4	974.1	992.9	990.0	1026.1	1060.9	1068.2	1075.4	1055.1	1007.4
27.5°	1078.2	1069.5	1049.3	1050.7	1050.7	1092.7	1141.8	1151.9	1156.3	1139.0	1079.7
30°	1286.4	1286.4	1211.2	1160.6	1127.4	1164.9	1234.4	1251.7	1257.4	1231.4	1153.3
32.5°	1649.1	1649.1	1510.4	1381.8	1256.0	1256.0	1335.5	1367.3	1373.1	1342.6	1251.7
35°	2111.6	2108.7	1900.6	1724.2	1478.6	1386.1	1453.9	1507.4	1524.9	1484.4	1378.9
37.5°	2603.1	2584.2	2360.2	2157.9	1821.1	1594.2	1614.4	1685.3	1701.1	1668.0	1543.6
40°	3002.0	2980.2	2799.6	2630.4	2263.4	1926.7	1845.7	1910.8	1929.5	1883.2	1740.1
42.5°	3363.3	3309.9	3185.5	3064.1	2772.1	2501.9	2153.5	2179.6	2199.8	2150.6	1961.3
45°	3624.9	3542.5	3478.9	3441.3	3286.7	3133.5	2552.4	2500.4	2507.7	2447.0	2202.6
47.5°	3632.0	3574.3	3580.0	3678.4	3742.0	3736.2	3071.3	2886.3	2858.9	2757.6	2460.0
50°	3285.2	3318.5	3424.0	3704.4	4048.4	4256.4	3688.5	3343.0	3260.7	3078.5	2715.8
52.5°	2707.1	2759.1	2957.1	3429.8	4093.1	4599.1	4328.8	3864.8	3717.4	3396.5	2912.3
55°	2120.3	2123.1	2331.3	2812.7	3794.0	4661.1	4840.3	4438.6	4213.1	3637.9	3042.4
57.5°	1458.4	1537.8	1802.3	2126.1	3119.1	4351.8	5032.7	4883.7	4593.3	3786.7	3133.5
60°	955.3	959.7	1267.6	1641.9	2123.1	3541.1	4915.5	5119.4	4901.2	3874.8	3195.6
62°	673.5	680.7	871.5	1341.3	1600.1	2538.0	4656.9	5168.5	5074.5	3927.0	3260.7
62.5°	624.4	630.3	790.6	1266.2	1503.1	2276.3	4564.4	5156.9	5100.5	3944.3	3283.8
65°	458.1	458.1	517.5	870.1	1101.3	1230.0	3867.7	4927.2	5065.9	4083.1	3370.5
67.5°	354.1	356.9	377.2	536.2	831.0	745.9	2468.6	4409.7	4704.6	4288.2	3419.7
70°	305.0	303.4	318.0	355.5	599.8	495.8	1086.9	3441.3	3940.0	4236.2	3374.8
72.5°	225.5	226.9	260.1	312.3	417.7	322.3	491.5	1827.0	2555.4	3315.6	2892.2
75°	144.5	146.0	183.6	245.6	300.7	211.0	283.2	544.9	1046.4	1838.4	1769.1
77.5°	96.8	99.7	120.0	171.9	263.1	131.5	177.8	228.3	315.0	689.4	634.6
80°	65.0	65.0	76.5	115.6	166.1	109.9	95.4	151.8	163.3	213.8	107.0
82.5°	43.4	43.4	50.6	76.5	108.3	98.3	57.9	82.4	95.4	107.0	37.5
85°	26.1	26.1	34.7	47.7	70.8	54.9	37.5	46.3	49.1	67.9	20.2
87.5°	15.9	14.5	23.1	33.2	37.5	33.2	24.6	24.6	26.1	37.5	10.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265989

CATALOG NUMBER: ARCH-AF24-100-D-U-T2U-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3	708.3
2.5°	706.7	705.3	703.9	700.9	696.6	693.8	690.8	688.0	685.0	685.0	689.4
5°	719.8	715.4	709.7	703.9	695.2	689.4	685.0	679.3	676.5	676.5	677.9
7.5°	735.7	731.3	721.2	711.1	698.2	688.0	677.9	664.8	654.8	650.5	654.8
10°	753.0	747.2	732.7	716.8	702.5	676.5	643.1	602.8	568.0	552.1	559.4
12.5°	774.7	767.5	750.2	728.4	695.2	631.6	549.3	455.4	396.1	368.6	374.4
15°	806.5	796.3	771.9	738.5	664.8	527.6	393.1	284.8	229.7	206.7	209.6
17.5°	844.0	831.0	797.9	735.7	586.9	380.2	234.2	166.1	143.1	137.4	137.4
20°	884.6	867.3	823.8	714.1	468.2	238.5	146.0	127.2	118.5	114.2	114.2
22.5°	926.4	903.3	845.6	663.4	333.9	148.8	120.0	107.0	96.8	92.4	92.4
25°	977.0	946.8	867.3	575.3	212.4	120.0	102.6	89.7	79.5	73.8	75.2
27.5°	1036.4	997.3	886.0	465.4	137.4	104.1	85.2	72.3	63.6	60.6	60.6
30°	1098.4	1052.3	890.3	348.4	111.3	89.7	70.8	59.3	53.4	50.6	50.6
32.5°	1183.7	1123.1	877.4	231.3	94.0	75.2	59.3	49.1	44.8	43.4	43.4
35°	1296.4	1215.5	846.9	143.1	79.5	62.2	49.1	43.4	39.0	37.5	37.5
37.5°	1439.5	1344.1	793.6	98.3	67.9	50.6	42.0	37.5	34.7	33.2	33.2
40°	1630.3	1500.3	724.2	85.2	57.9	43.4	36.1	33.2	30.4	30.4	30.4
42.5°	1832.7	1689.6	634.6	75.2	49.1	37.5	31.8	28.9	27.5	26.1	26.1
45°	2053.9	1883.2	523.3	66.5	42.0	33.2	28.9	24.6	23.1	23.1	23.1
47.5°	2273.5	2082.7	401.8	57.9	36.1	28.9	24.6	21.6	20.2	18.8	18.8
50°	2498.9	2263.4	294.9	50.6	31.8	26.1	21.6	18.8	15.9	14.5	14.5
52.5°	2662.2	2371.7	215.4	43.4	27.5	21.6	17.3	14.5	11.6	10.2	10.2
55°	2782.3	2438.3	157.6	36.1	24.6	18.8	14.5	11.6	8.7	8.7	7.2
57.5°	2876.3	2470.1	118.5	31.8	21.6	15.9	11.6	8.7	7.2	5.7	5.7
60°	2948.4	2471.4	88.2	26.1	18.8	13.0	8.7	5.7	4.3	4.3	4.3
62°	3043.8	2490.3	72.3	21.6	17.3	11.6	7.2	4.3	2.9	1.4	1.4
62.5°	3071.3	2497.6	69.3	21.6	15.9	10.2	5.7	4.3	2.9	1.4	1.4
65°	3198.5	2510.6	53.4	17.3	13.0	8.7	4.3	2.9	0.0	0.0	0.0
67.5°	3314.1	2490.3	39.0	13.0	10.2	5.7	4.3	1.4	0.0	0.0	0.0
70°	3302.6	2351.6	27.5	8.7	7.2	4.3	2.9	0.0	0.0	0.0	0.0
72.5°	2721.5	1760.4	18.8	7.2	4.3	2.9	1.4	0.0	0.0	0.0	0.0
75°	1643.3	770.3	13.0	4.3	4.3	2.9	1.4	0.0	0.0	0.0	0.0
77.5°	539.2	279.0	8.7	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0
80°	88.2	46.3	4.3	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0
82.5°	27.5	11.6	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0
85°	10.2	4.3	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	2.9	2.9	2.9	1.4	1.4	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)