

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: P265991

Luminaire Tested: **ARCH-AF24-100-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265991
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-AF24-100-D-U-T3-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA 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: 6180.4 lumens
Efficiency: N/A
Efficacy: 64.4 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): 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

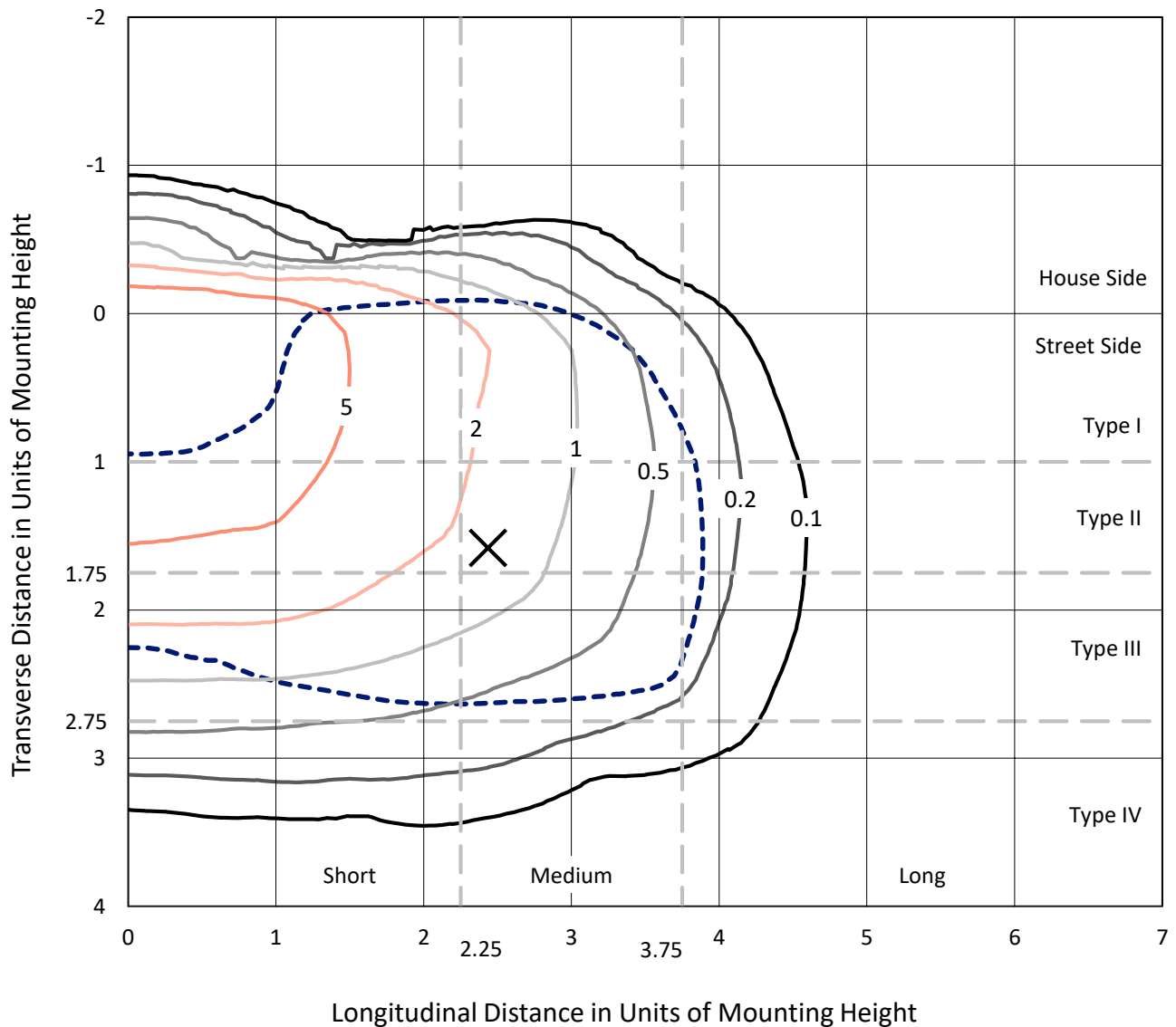


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

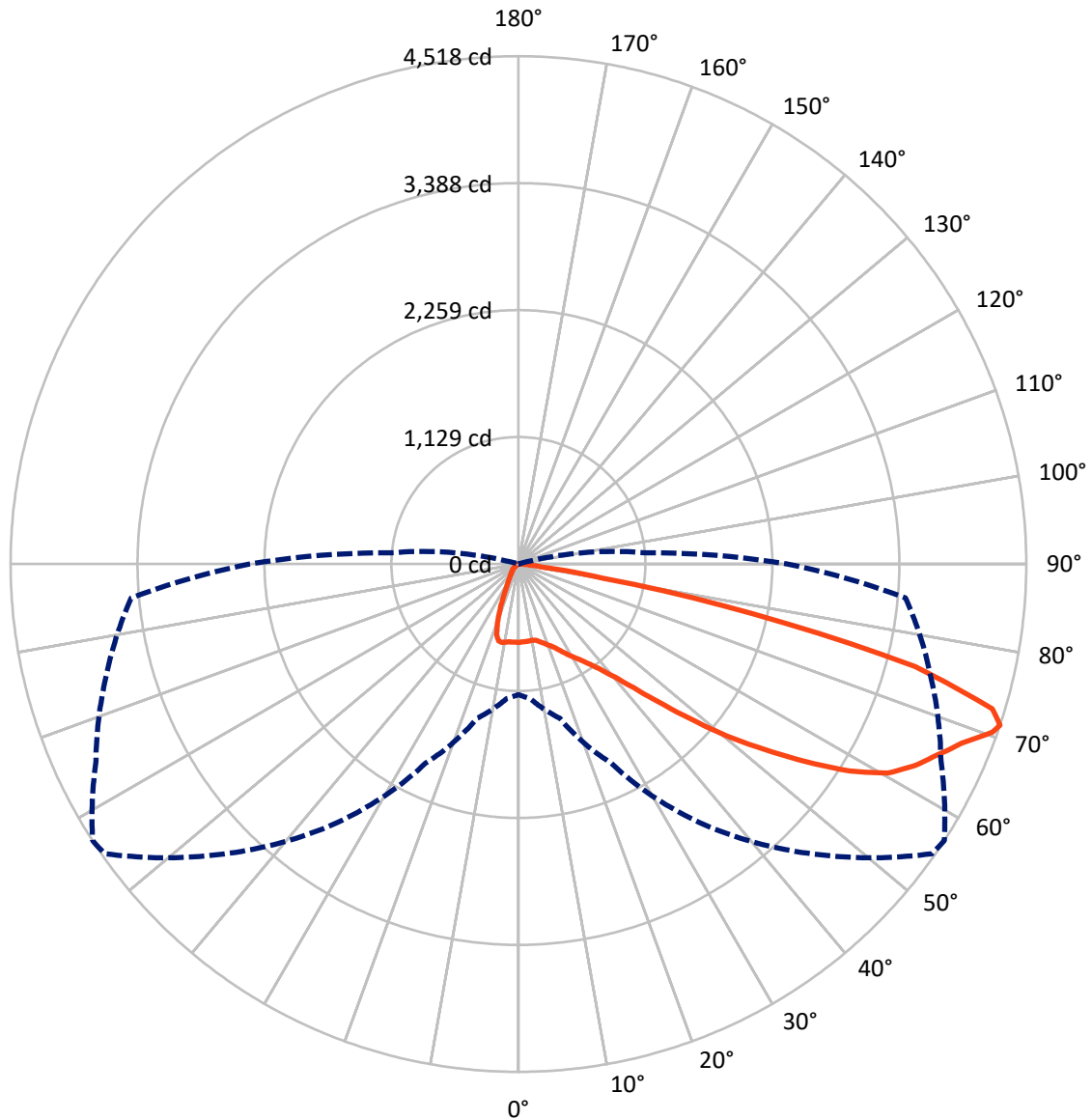


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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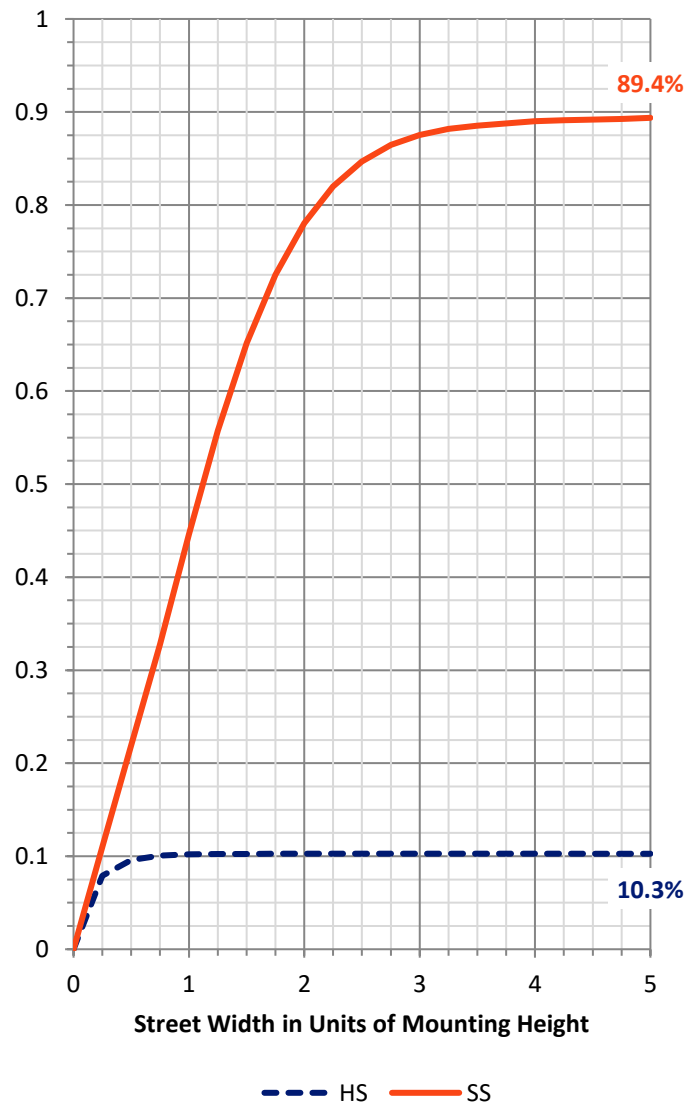
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	640.5	0.0	640.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5539.9	0.0	5539.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	6180.4	0.0	6180.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	1.1
10°-20°	175.4	2.8
20°-30°	273.6	4.4
30°-40°	462.4	7.5
40°-50°	898.2	14.5
50°-60°	1508.3	24.4
60°-70°	1800.0	29.1
70°-80°	948.6	15.3
80°-90°	48.2	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°	6180.4	100.0
0°-180°	6180.4	100.0

Coefficient of Utilization



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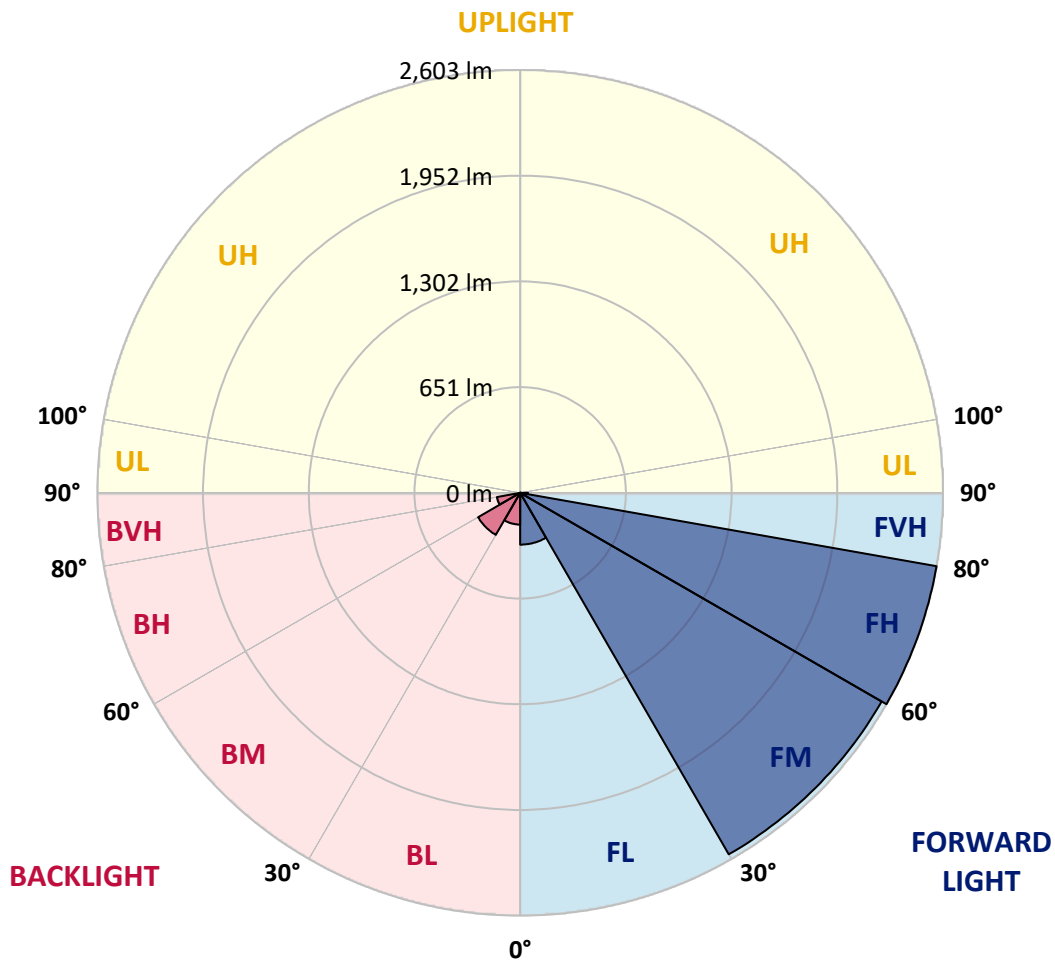
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.1	5.2			
FM	(30°-60°)	2569.9	41.6			
FH	(60°-80°)	2603.2	42.1			G2/5000
FVH	(80°-90°)	47.7	0.8			G1/100
BL	(0°-30°)	195.5	3.2	B1/500		
BM	(30°-60°)	299.1	4.8	B1/1000		
BH	(60°-80°)	145.4	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°	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5
2.5°	688.5	688.5	688.5	689.9	691.2	691.2	694.2	692.8	692.8	692.8	695.6
5°	669.6	671.2	672.6	675.4	681.2	685.5	692.8	692.8	694.2	697.1	698.5
7.5°	643.7	645.3	649.6	655.3	666.8	676.9	688.5	691.2	695.6	702.8	705.7
10°	627.9	630.8	636.5	643.7	656.8	669.6	684.1	688.5	701.3	714.3	721.5
12.5°	623.7	625.0	630.8	642.3	658.2	674.0	692.8	697.1	715.8	735.9	747.4
15°	630.8	632.2	635.1	648.0	666.8	686.9	711.5	717.1	740.3	763.3	777.8
17.5°	643.7	643.7	646.6	658.2	678.3	701.3	733.0	741.7	767.6	793.6	809.4
20°	652.3	652.3	656.8	668.2	691.2	721.5	759.0	770.4	799.3	828.1	842.5
22.5°	661.1	662.5	666.8	679.7	705.7	747.4	790.7	802.1	835.3	865.5	879.9
25°	685.5	684.1	685.5	697.1	727.3	779.1	833.8	848.3	882.9	915.9	923.2
27.5°	753.1	750.4	731.6	724.5	747.4	812.2	888.6	902.9	943.3	976.5	976.5
30°	908.7	902.9	857.0	797.9	779.1	842.5	940.4	960.6	1012.4	1041.2	1032.6
32.5°	1106.1	1093.1	1033.9	933.2	858.3	882.9	995.1	1018.1	1084.4	1108.9	1090.3
35°	1322.0	1320.6	1247.1	1117.6	1011.0	966.3	1065.7	1093.1	1176.6	1198.2	1167.9
37.5°	1551.1	1556.9	1507.8	1329.2	1204.0	1103.2	1159.4	1191.1	1293.3	1319.3	1290.3
40°	1806.0	1804.5	1785.8	1574.1	1435.9	1297.6	1294.6	1323.6	1447.3	1487.8	1447.3
42.5°	2128.5	2125.7	2057.9	1867.8	1716.8	1551.1	1492.1	1502.1	1640.3	1706.6	1647.5
45°	2457.0	2436.7	2358.9	2194.7	2060.9	1865.1	1752.7	1752.7	1870.8	1961.4	1869.4
47.5°	2639.8	2619.6	2587.9	2497.3	2457.0	2237.9	2072.4	2052.2	2144.4	2236.6	2107.0
50°	2880.3	2880.3	2801.2	2766.5	2835.7	2681.6	2425.2	2405.0	2449.7	2523.2	2353.2
52.5°	3070.4	3035.8	2979.7	3010.0	3207.3	3136.7	2778.1	2739.2	2773.7	2792.6	2567.8
55°	3149.6	3116.5	3112.2	3223.1	3528.5	3430.4	3139.5	3105.0	3102.0	3010.0	2755.0
57.5°	3165.4	3136.7	3191.4	3385.8	3841.0	3671.0	3499.5	3473.7	3393.0	3162.7	2946.6
60°	3031.5	3046.0	3178.5	3475.2	4025.2	3879.8	3803.5	3776.0	3590.3	3292.2	3159.7
62.5°	2756.4	2791.0	3038.7	3483.7	3957.6	3964.8	3971.9	3953.3	3743.0	3410.2	3374.4
65°	2431.1	2441.1	2739.2	3364.2	3839.4	3938.9	4095.8	4094.4	3859.7	3542.7	3616.2
67.5°	2003.3	2020.6	2278.3	2961.0	3603.3	3927.3	4258.5	4254.3	3992.1	3694.0	3760.2
70°	1490.6	1512.1	1721.1	2302.8	3076.2	3783.3	4471.8	4474.5	4131.8	3809.3	3661.0
71°	1162.1	1201.2	1420.0	1955.7	2806.8	3637.9	4491.9	4517.8	4147.7	3793.5	3456.4
72.5°	570.3	616.3	891.5	1376.8	2310.0	3312.4	4359.4	4409.8	4048.3	3596.1	2955.2
75°	148.3	156.9	266.4	563.1	1238.6	2194.7	3515.4	3643.6	3309.4	2737.8	1806.0
77.5°	93.7	96.5	125.4	218.8	463.7	833.8	2065.3	2128.5	1890.9	1386.9	636.5
80°	66.3	67.7	79.2	141.2	270.7	243.4	743.1	770.4	684.1	367.2	113.7
82.5°	40.3	40.3	57.6	90.6	167.1	132.5	195.9	208.9	184.3	102.2	37.5
85°	23.0	24.4	36.0	62.0	79.2	64.8	73.4	77.8	79.2	67.7	15.8
87.5°	18.8	20.1	31.7	51.8	43.2	31.7	31.7	33.1	34.6	40.3	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°	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5
2.5°	695.6	695.6	697.1	695.6	695.6	695.6	697.1	697.1	697.1	699.9	701.3
5°	698.5	698.5	698.5	697.1	695.6	695.6	698.5	699.9	699.9	704.2	704.2
7.5°	705.7	705.7	702.8	699.9	697.1	692.8	694.2	695.6	694.2	695.6	695.6
10°	721.5	721.5	717.1	711.5	702.8	689.9	672.6	650.9	630.8	623.7	620.6
12.5°	747.4	746.0	737.4	727.3	708.6	663.8	599.1	522.8	459.5	442.1	436.3
15°	776.2	773.4	763.3	746.0	695.6	577.5	442.1	344.2	283.8	269.3	266.4
17.5°	806.5	802.1	787.8	753.1	636.5	429.2	285.1	216.0	183.0	180.0	181.5
20°	838.2	832.4	812.2	738.8	514.1	286.6	184.3	167.1	164.2	164.2	165.6
22.5°	874.2	867.0	839.6	686.9	374.5	190.1	158.5	156.9	155.5	154.1	154.1
25°	915.9	907.3	865.5	593.3	257.9	155.5	151.3	147.0	144.0	141.2	139.6
27.5°	966.3	954.8	885.6	478.2	177.1	145.4	142.7	135.4	129.6	123.8	123.8
30°	1016.7	1002.4	879.9	360.0	144.0	135.4	129.6	121.0	112.4	106.5	105.1
32.5°	1070.1	1055.7	842.5	242.0	131.1	123.8	116.7	103.7	93.7	86.3	85.0
35°	1149.2	1137.8	769.0	159.9	118.0	109.5	99.4	86.3	73.4	66.3	64.8
37.5°	1267.4	1253.0	678.3	122.3	103.7	90.6	82.0	67.7	54.7	47.5	46.2
40°	1425.8	1382.5	570.3	107.9	90.6	74.9	63.4	49.0	38.8	34.6	34.6
42.5°	1610.1	1507.8	453.6	97.9	80.7	62.0	46.2	33.1	27.4	26.0	26.0
45°	1806.0	1624.6	337.0	90.6	70.5	49.0	33.1	23.0	20.1	18.8	18.8
47.5°	2007.6	1719.5	234.7	82.0	59.1	37.5	23.0	17.2	14.5	12.9	12.9
50°	2196.3	1781.5	165.6	73.4	50.5	27.4	17.2	12.9	10.2	10.2	10.2
52.5°	2327.2	1775.7	119.6	63.4	38.8	18.8	11.5	8.7	8.7	8.7	8.7
55°	2442.5	1754.1	93.7	54.7	30.3	12.9	8.7	7.1	7.1	5.7	5.7
57.5°	2540.4	1719.5	79.2	44.6	21.6	10.2	5.7	5.7	4.3	4.3	4.3
60°	2623.9	1676.3	66.3	37.5	14.5	7.1	4.3	2.9	2.9	1.4	2.9
62.5°	2737.8	1649.0	57.6	28.7	10.2	4.3	2.9	1.4	1.4	0.0	0.0
65°	2821.2	1597.1	49.0	20.1	5.7	2.9	1.4	1.4	0.0	0.0	0.0
67.5°	2824.1	1503.6	36.0	11.5	4.3	2.9	1.4	0.0	0.0	0.0	0.0
70°	2596.6	1281.7	23.0	5.7	2.9	1.4	1.4	0.0	0.0	0.0	0.0
71°	2387.8	1134.9	18.8	4.3	2.9	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	1967.3	833.8	14.5	4.3	1.4	1.4	0.0	0.0	0.0	0.0	0.0
75°	1084.4	302.4	7.1	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	347.0	92.2	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	59.1	14.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.1	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)