

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: P214819

Luminaire Tested: **ARCH-AF24-100-D-U-T3-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214819
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-T3-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 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: 7114 lumens
Efficiency: N/A
Efficacy: 74.1 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): 96
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

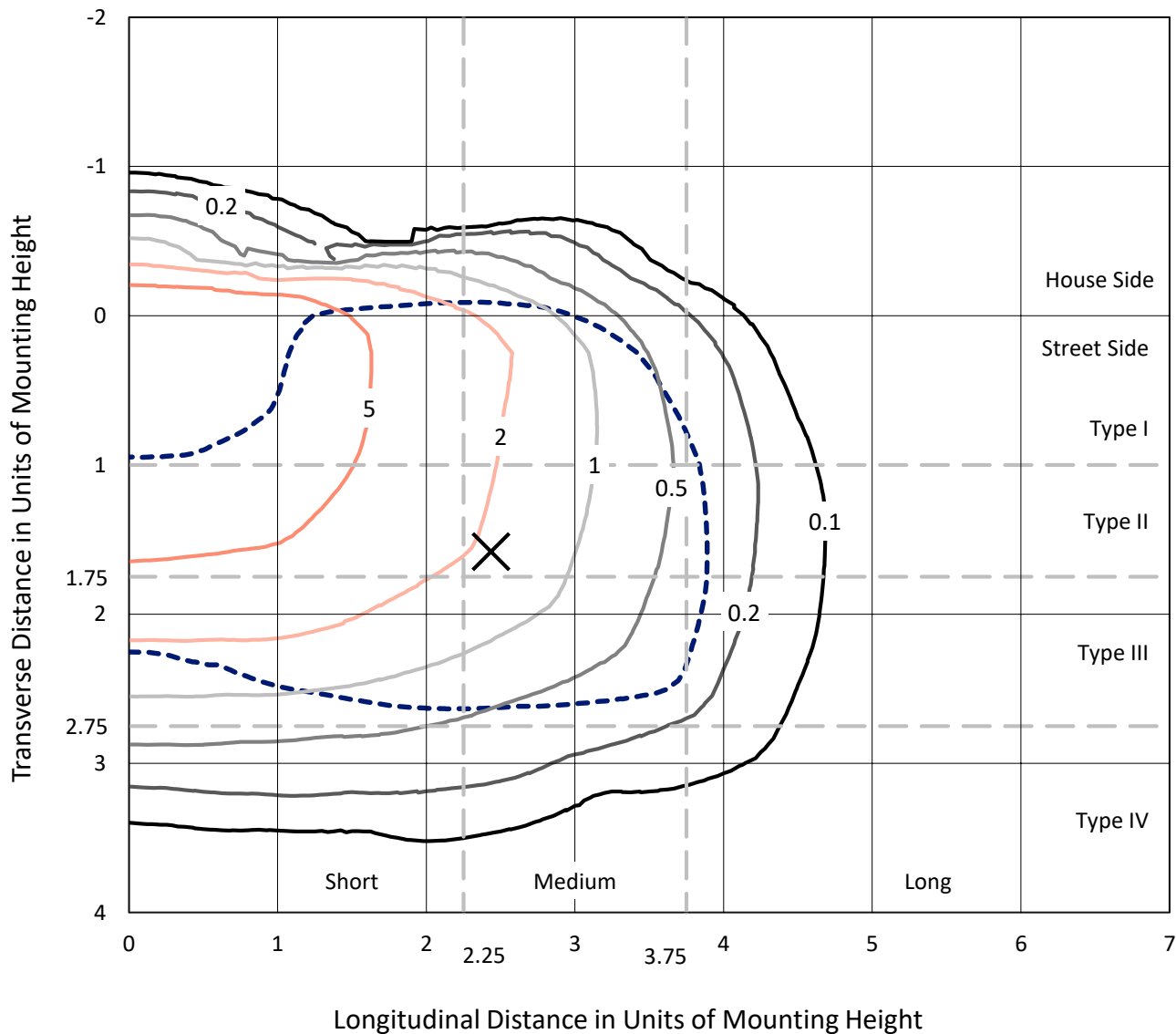


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

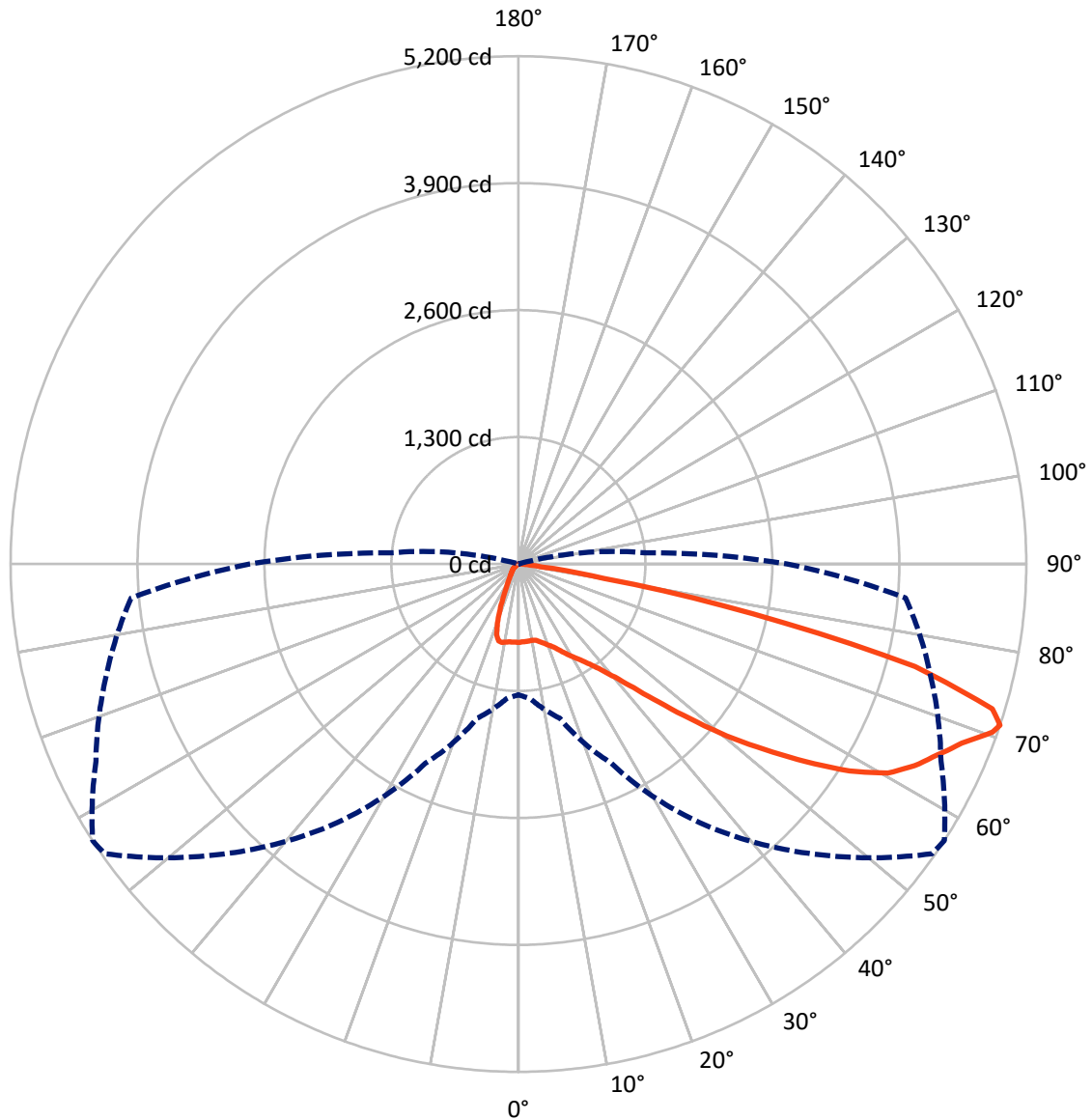


Based on 10 foot mounting height. Maximum calculated value = 10 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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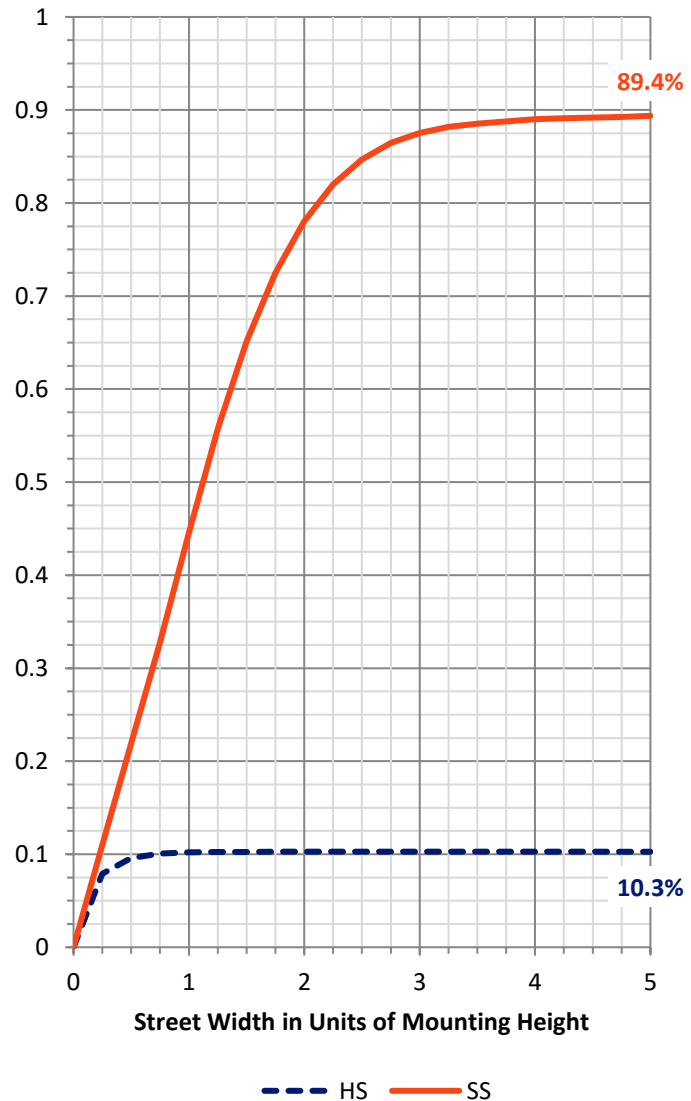
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	737.2	0.0	737.2
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	6376.8	0.0	6376.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	7114.0	0.0	7114.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	1.1
10°-20°	201.9	2.8
20°-30°	314.9	4.4
30°-40°	532.3	7.5
40°-50°	1033.8	14.5
50°-60°	1736.2	24.4
60°-70°	2072.0	29.1
70°-80°	1091.9	15.3
80°-90°	55.5	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°	7114.0	100.0
0°-180°	7114.0	100.0

Coefficient of Utilization



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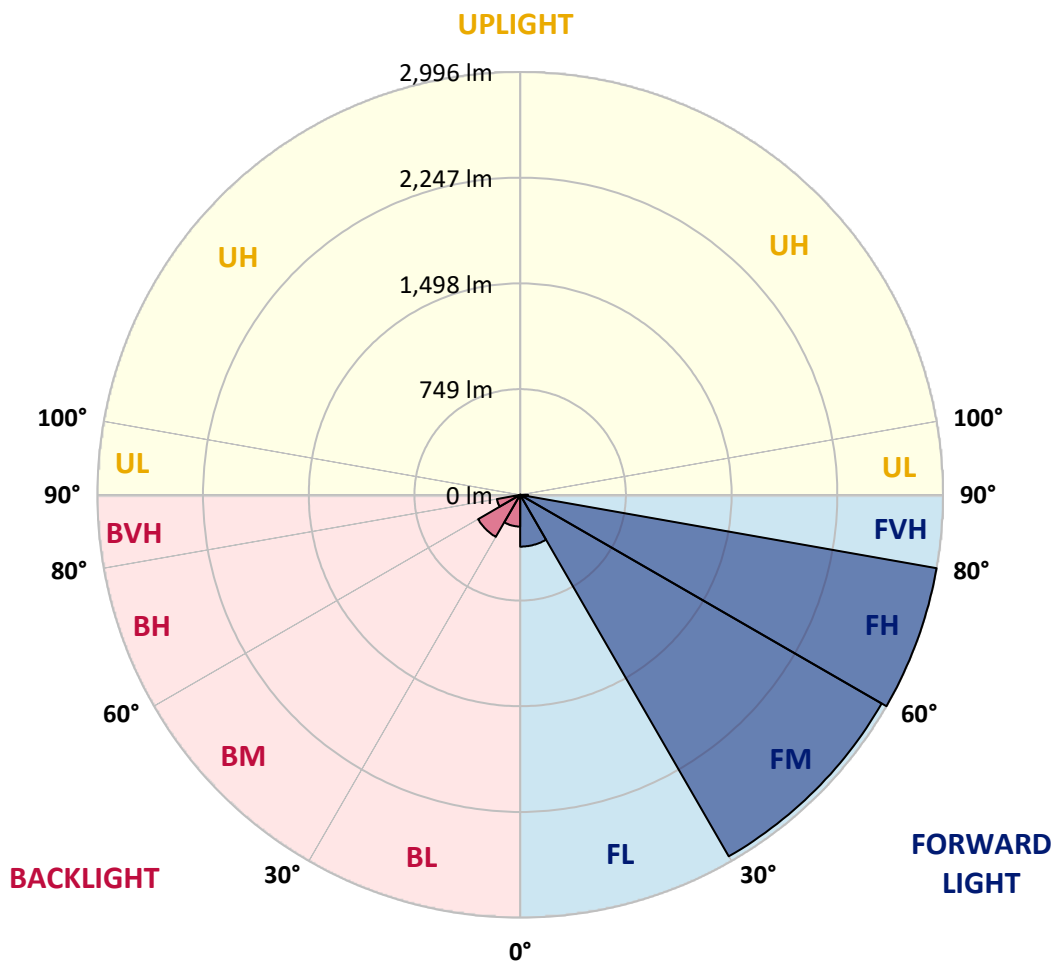
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	367.3	5.2			
FM	(30°-60°)	2958.1	41.6			
FH	(60°-80°)	2996.5	42.1			G2/5000
FVH	(80°-90°)	55.0	0.8			G1/100
BL	(0°-30°)	225.0	3.2	B1/500		
BM	(30°-60°)	344.2	4.8	B1/1000		
BH	(60°-80°)	167.4	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°	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0
2.5°	792.4	792.4	792.4	794.0	795.7	795.7	799.0	797.4	797.4	797.4	800.7
5°	770.8	772.5	774.2	777.5	784.1	789.1	797.4	797.4	799.0	802.3	804.0
7.5°	741.0	742.7	747.6	754.3	767.5	779.1	792.4	795.7	800.7	809.0	812.3
10°	722.8	726.1	732.7	741.0	755.9	770.8	787.4	792.4	807.3	822.2	830.5
12.5°	717.8	719.4	726.1	739.3	757.6	775.8	797.4	802.3	823.9	847.1	860.4
15°	726.1	727.7	731.1	746.0	767.5	790.7	818.9	825.5	852.1	878.6	895.2
17.5°	741.0	741.0	744.3	757.6	780.8	807.3	843.8	853.7	883.6	913.4	931.6
20°	750.9	750.9	755.9	769.2	795.7	830.5	873.6	886.9	920.0	953.2	969.8
22.5°	760.9	762.5	767.5	782.4	812.3	860.4	910.1	923.3	961.5	996.3	1012.9
25°	789.1	787.4	789.1	802.3	837.1	896.8	959.8	976.4	1016.2	1054.3	1062.6
27.5°	867.0	863.7	842.1	833.8	860.4	934.9	1022.8	1039.4	1085.8	1123.9	1123.9
30°	1046.0	1039.4	986.3	918.4	896.8	969.8	1082.5	1105.7	1165.4	1198.5	1188.6
32.5°	1273.1	1258.2	1190.2	1074.2	988.0	1016.2	1145.5	1172.0	1248.3	1276.4	1254.9
35°	1521.8	1520.1	1435.6	1286.4	1163.7	1112.3	1226.7	1258.2	1354.3	1379.2	1344.4
37.5°	1785.4	1792.0	1735.6	1530.1	1385.8	1269.8	1334.5	1370.9	1488.6	1518.5	1485.3
40°	2078.8	2077.1	2055.6	1811.9	1652.7	1493.6	1490.3	1523.4	1666.0	1712.4	1666.0
42.5°	2450.1	2446.8	2368.9	2150.1	1976.0	1785.4	1717.4	1729.0	1888.1	1964.4	1896.4
45°	2828.1	2804.8	2715.3	2526.4	2372.2	2146.7	2017.4	2017.4	2153.4	2257.8	2151.7
47.5°	3038.6	3015.4	2978.9	2874.5	2828.1	2576.1	2385.4	2362.2	2468.3	2574.4	2425.2
50°	3315.4	3315.4	3224.2	3184.5	3264.0	3086.7	2791.6	2768.4	2819.8	2904.3	2708.7
52.5°	3534.2	3494.5	3429.8	3464.6	3691.7	3610.5	3197.7	3153.0	3192.8	3214.3	2955.7
55°	3625.4	3587.3	3582.3	3710.0	4061.4	3948.7	3613.8	3574.0	3570.7	3464.6	3171.2
57.5°	3643.6	3610.5	3673.5	3897.3	4421.1	4225.5	4028.2	3998.4	3905.6	3640.3	3391.7
60°	3489.5	3506.1	3658.6	4000.1	4633.3	4465.9	4378.0	4346.5	4132.7	3789.5	3637.0
62.5°	3172.9	3212.6	3497.8	4010.0	4555.4	4563.7	4572.0	4550.4	4308.4	3925.5	3884.0
65°	2798.2	2809.8	3153.0	3872.4	4419.5	4533.8	4714.5	4712.9	4442.7	4078.0	4162.5
67.5°	2305.9	2325.8	2622.5	3408.3	4147.6	4520.6	4901.9	4896.9	4595.2	4252.0	4328.3
70°	1715.7	1740.6	1981.0	2650.7	3540.9	4354.8	5147.2	5150.5	4756.0	4384.6	4213.9
71°	1337.8	1382.5	1634.5	2251.2	3230.9	4187.4	5170.4	5200.2	4774.2	4366.4	3978.5
72.5°	656.5	709.5	1026.1	1584.8	2659.0	3812.7	5017.9	5075.9	4659.8	4139.3	3401.6
75°	170.7	180.7	306.7	648.2	1425.6	2526.4	4046.5	4194.0	3809.4	3151.3	2078.8
77.5°	107.8	111.1	144.2	252.0	533.8	959.8	2377.2	2450.1	2176.6	1596.4	732.7
80°	76.3	77.9	91.2	162.5	311.6	280.2	855.4	886.9	787.4	422.7	131.0
82.5°	46.4	46.4	66.3	104.4	192.3	152.5	225.4	240.4	212.2	117.7	43.1
85°	26.5	28.2	41.4	71.3	91.2	74.6	84.5	89.5	91.2	77.9	18.2
87.5°	21.6	23.2	36.5	59.7	49.7	36.5	36.5	38.1	39.8	46.4	8.3
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°	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0	804.0
2.5°	800.7	800.7	802.3	800.7	800.7	800.7	802.3	802.3	802.3	805.6	807.3
5°	804.0	804.0	804.0	802.3	800.7	800.7	804.0	805.6	805.6	810.6	810.6
7.5°	812.3	812.3	809.0	805.6	802.3	797.4	799.0	800.7	799.0	800.7	800.7
10°	830.5	830.5	825.5	818.9	809.0	794.0	774.2	749.3	726.1	717.8	714.5
12.5°	860.4	858.7	848.7	837.1	815.6	764.2	689.6	601.7	528.8	508.9	502.3
15°	893.5	890.2	878.6	858.7	800.7	664.7	508.9	396.2	326.6	310.0	306.7
17.5°	928.3	923.3	906.8	867.0	732.7	494.0	328.2	248.7	210.5	207.2	208.9
20°	964.8	958.2	934.9	850.4	591.8	329.9	212.2	192.3	189.0	189.0	190.6
22.5°	1006.2	997.9	966.4	790.7	431.0	218.8	182.3	180.7	179.0	177.4	177.4
25°	1054.3	1044.4	996.3	683.0	296.7	179.0	174.1	169.1	165.8	162.5	160.8
27.5°	1112.3	1099.1	1019.5	550.4	203.9	167.4	164.1	155.8	149.2	142.6	142.6
30°	1170.3	1153.8	1012.9	414.4	165.8	155.8	149.2	139.2	129.3	122.7	121.0
32.5°	1231.7	1215.1	969.8	278.5	150.9	142.6	134.3	119.4	107.8	99.5	97.8
35°	1322.9	1309.6	885.2	184.0	135.9	126.0	114.4	99.5	84.5	76.3	74.6
37.5°	1458.8	1442.2	780.8	140.9	119.4	104.4	94.5	77.9	63.0	54.7	53.0
40°	1641.1	1591.4	656.5	124.3	104.4	86.2	72.9	56.4	44.8	39.8	39.8
42.5°	1853.3	1735.6	522.2	112.7	92.8	71.3	53.0	38.1	31.5	29.8	29.8
45°	2078.8	1869.9	387.9	104.4	81.2	56.4	38.1	26.5	23.2	21.6	21.6
47.5°	2310.8	1979.3	270.2	94.5	68.0	43.1	26.5	19.9	16.6	14.9	14.9
50°	2528.0	2050.6	190.6	84.5	58.0	31.5	19.9	14.9	11.6	11.6	11.6
52.5°	2678.9	2044.0	137.6	72.9	44.8	21.6	13.3	9.9	9.9	9.9	9.9
55°	2811.5	2019.1	107.8	63.0	34.8	14.9	9.9	8.3	8.3	6.6	6.6
57.5°	2924.2	1979.3	91.2	51.4	24.9	11.6	6.6	6.6	5.0	5.0	5.0
60°	3020.3	1929.6	76.3	43.1	16.6	8.3	5.0	3.3	3.3	1.7	3.3
62.5°	3151.3	1898.1	66.3	33.2	11.6	5.0	3.3	1.7	1.7	0.0	0.0
65°	3247.5	1838.4	56.4	23.2	6.6	3.3	1.7	1.7	0.0	0.0	0.0
67.5°	3250.8	1730.7	41.4	13.3	5.0	3.3	1.7	0.0	0.0	0.0	0.0
70°	2988.9	1475.4	26.5	6.6	3.3	1.7	1.7	0.0	0.0	0.0	0.0
71°	2748.5	1306.3	21.6	5.0	3.3	1.7	0.0	0.0	0.0	0.0	0.0
72.5°	2264.4	959.8	16.6	5.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0
75°	1248.3	348.1	8.3	3.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	399.5	106.1	5.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	68.0	16.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.2	6.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	1.7	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)