

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: P397970

Luminaire Tested: **ARCH-S-PA1-70-727-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-727-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 930mA 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: 5746 lumens
Efficiency: N/A
Efficacy: 77.6 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

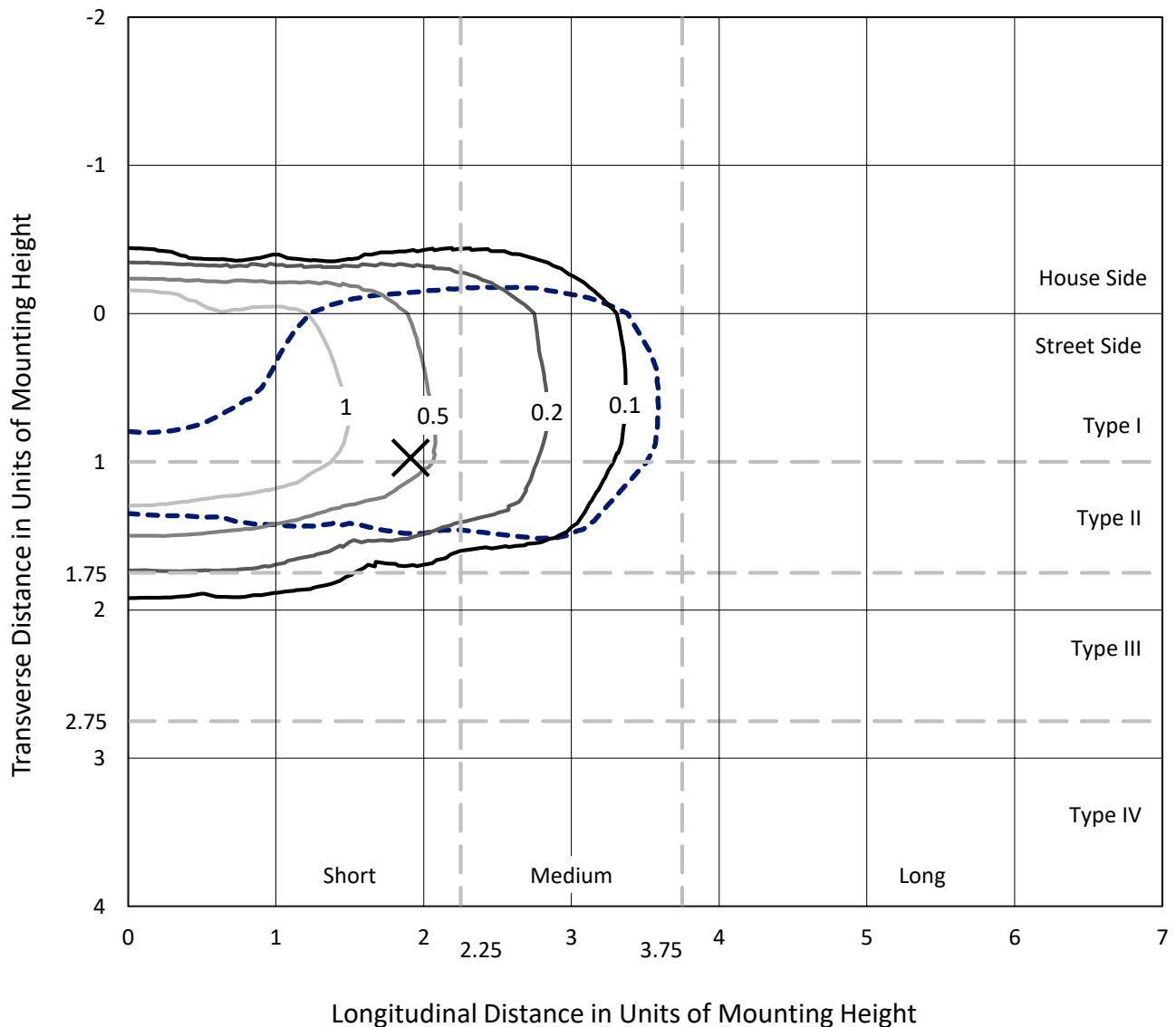
Input Watts (W): 74
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

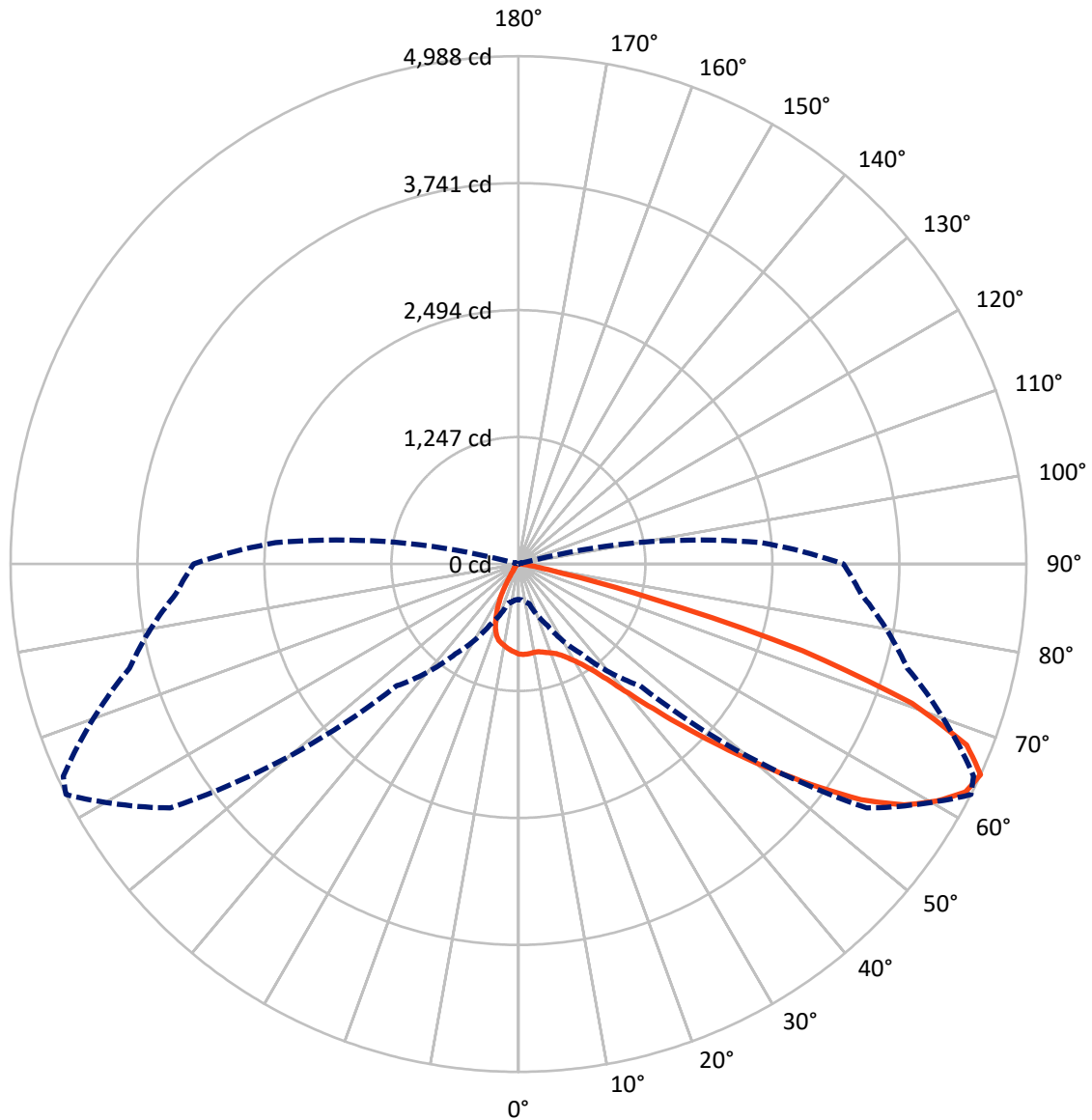
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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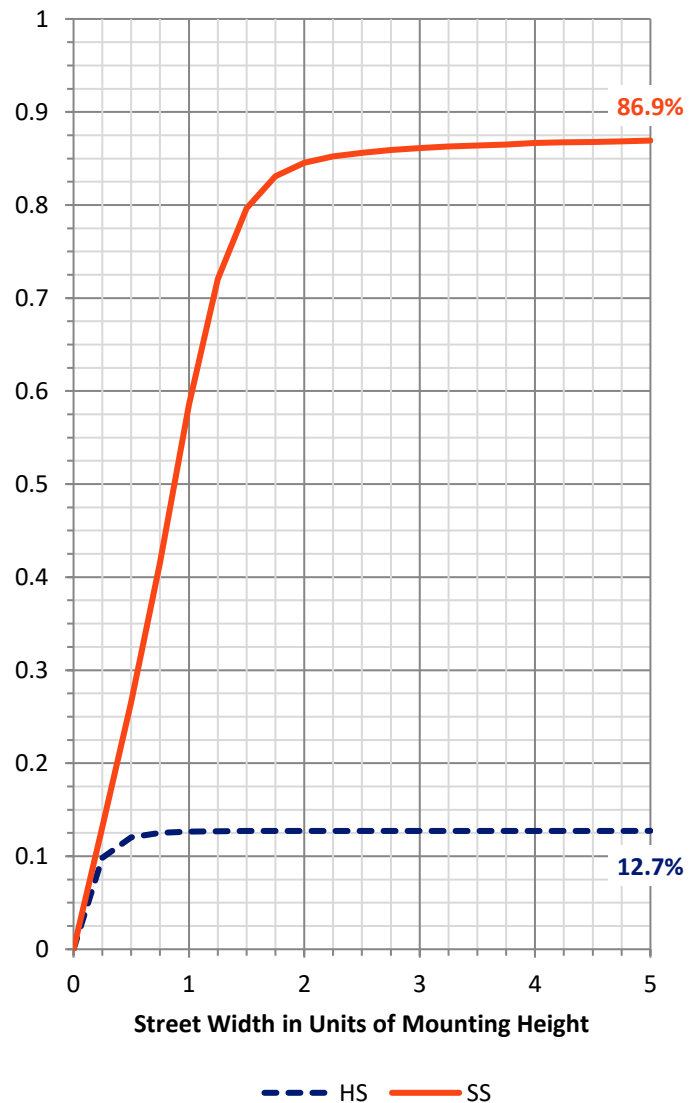
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	739.5	0.0	739.5
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5006.5	0.0	5006.5
	% Fixture	87.1	0.0	87.1
Total	Lumens	5746.0	0.0	5746.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	1.4
10°-20°	199.2	3.5
20°-30°	295.3	5.1
30°-40°	548.3	9.5
40°-50°	1161.6	20.2
50°-60°	1606.2	28.0
60°-70°	1285.9	22.4
70°-80°	534.2	9.3
80°-90°	34.3	0.6
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°	5746.0	100.0
0°-180°	5746.0	100.0



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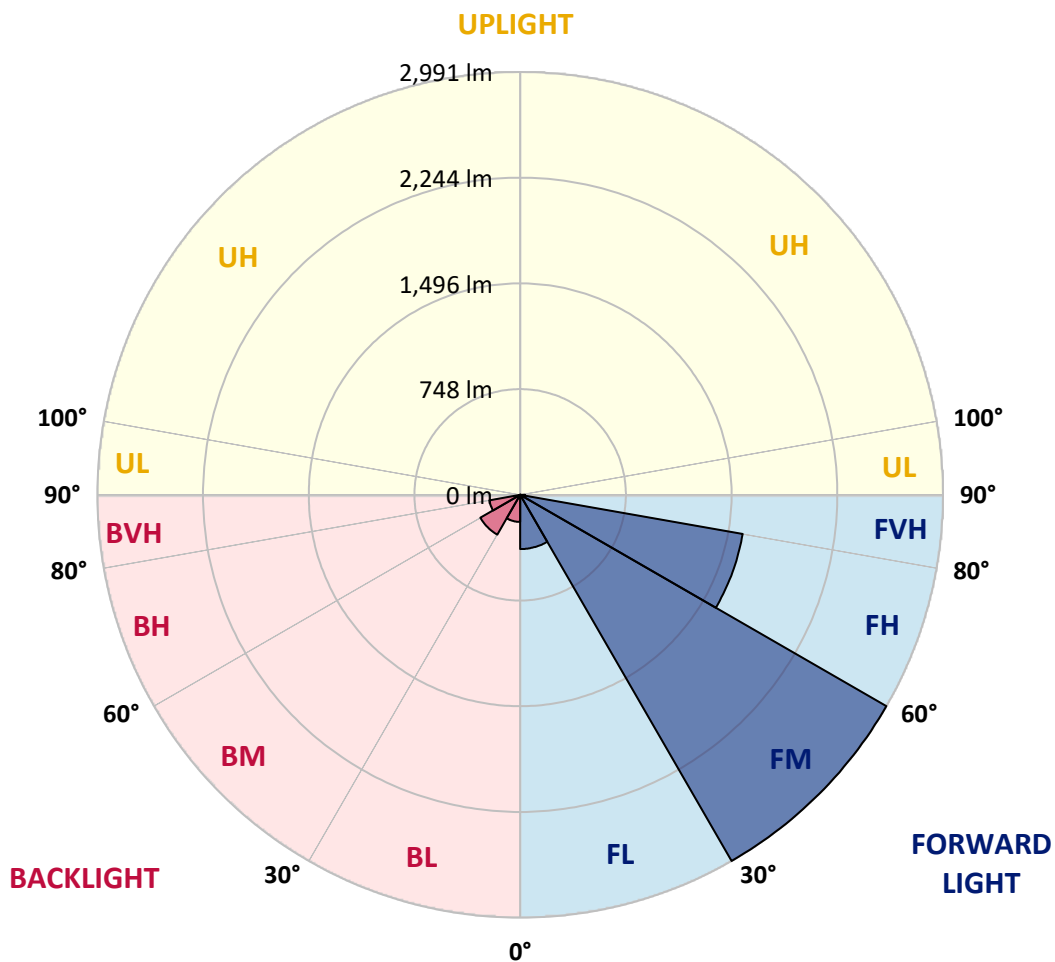
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	383.7	6.7			
FM	(30°-60°)	2991.4	52.1			
FH	(60°-80°)	1598.7	27.8			G1/1800
FVH	(80°-90°)	32.7	0.6			G1/100
BL	(0°-30°)	191.7	3.3	B1/500		
BM	(30°-60°)	324.8	5.7	B1/1000		
BH	(60°-80°)	221.4	3.9	B1/500		G1/500
BVH	(80°-90°)	1.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2
2.5°	900.4	898.2	896.0	894.9	894.9	893.9	889.5	888.4	886.3	884.1	881.9
5°	891.7	888.4	887.3	888.4	889.5	891.7	889.5	889.5	887.3	885.2	880.8
7.5°	870.0	867.8	868.9	872.2	873.2	880.8	881.9	885.2	885.2	883.0	879.8
10°	844.0	842.9	842.9	848.3	853.7	864.6	872.2	880.8	881.9	881.9	876.5
12.5°	824.4	823.3	826.6	833.1	844.0	858.1	871.1	884.1	886.3	887.3	878.7
15°	812.5	812.5	816.8	829.9	845.0	864.6	879.8	897.1	899.3	898.2	886.3
17.5°	801.6	802.7	811.4	833.1	850.5	876.5	894.9	914.5	915.5	914.5	894.9
20°	797.3	799.5	812.5	840.7	860.2	889.5	913.4	932.9	934.0	929.7	903.6
22.5°	809.2	810.3	826.6	857.0	875.4	908.0	938.3	956.8	957.9	951.3	916.6
25°	850.5	850.5	864.6	890.6	906.9	939.4	972.0	993.7	993.7	986.1	945.9
27.5°	947.0	938.3	935.1	942.7	948.1	982.8	1017.5	1044.6	1043.6	1032.7	983.9
30°	1133.6	1111.9	1077.2	1038.1	1018.6	1042.5	1075.0	1109.7	1108.6	1091.3	1030.5
32.5°	1447.1	1415.6	1333.2	1230.1	1146.6	1119.5	1149.9	1187.8	1188.9	1168.3	1105.4
35°	1886.4	1836.5	1689.0	1545.8	1354.9	1251.8	1260.5	1301.7	1314.7	1303.9	1231.2
37.5°	2309.5	2263.9	2122.9	1924.4	1665.1	1454.7	1417.8	1453.6	1468.8	1468.8	1391.8
40°	2735.8	2682.6	2557.9	2358.3	2084.9	1771.4	1639.1	1668.4	1684.7	1687.9	1587.0
42.5°	3077.5	3042.8	2947.3	2792.2	2536.2	2326.8	1958.0	1941.7	1956.9	1945.0	1813.7
45°	3314.0	3286.9	3220.7	3162.1	3037.4	2932.1	2384.3	2274.8	2284.5	2243.3	2068.7
47.5°	3362.8	3332.4	3318.3	3399.7	3488.6	3514.7	2908.3	2670.7	2660.9	2569.8	2333.3
50°	3150.2	3153.4	3205.5	3437.6	3808.6	4042.9	3515.7	3117.6	3081.8	2879.0	2579.6
52.5°	2691.3	2743.4	2874.6	3251.1	3906.3	4427.0	4123.2	3591.7	3536.4	3179.5	2764.0
55°	2105.5	2172.8	2388.7	2821.5	3702.3	4598.4	4635.2	4084.2	3958.3	3405.1	2907.2
57.5°	1565.3	1585.9	1837.6	2232.5	3219.6	4430.2	4897.7	4463.8	4302.2	3585.2	3049.3
60°	975.2	988.2	1254.0	1699.8	2438.6	3808.6	4897.7	4725.3	4571.2	3746.8	3179.5
62.5°	606.4	610.7	710.5	1165.0	1657.5	2824.7	4694.9	4928.1	4804.5	3862.9	3291.2
65°	349.3	353.6	400.3	658.5	1078.3	1691.2	4176.4	4987.8	4932.5	3955.1	3378.0
67.5°	254.9	257.1	275.5	369.9	705.1	868.9	3137.2	4748.0	4817.5	4000.6	3375.8
70°	221.3	224.5	248.4	288.5	508.8	533.7	1596.8	4100.4	4294.6	3935.6	3274.9
72.5°	170.3	174.6	210.4	271.2	373.2	384.0	578.2	2918.0	3212.0	3528.8	2998.3
75°	117.2	121.5	157.3	223.5	308.1	287.5	317.8	1342.9	1694.4	2367.0	2282.4
77.5°	74.8	75.9	98.7	162.7	265.8	203.9	218.0	438.2	615.1	1070.7	1077.2
80°	49.9	51.0	60.7	105.2	182.2	188.8	134.5	202.9	222.4	312.4	217.0
82.5°	30.4	30.4	41.2	66.2	110.6	156.2	87.9	106.3	113.9	120.4	56.4
85°	11.9	11.9	24.9	43.4	69.4	72.7	55.3	61.8	65.1	70.5	26.0
87.5°	3.3	3.3	14.1	23.9	30.4	33.6	33.6	30.4	32.5	40.1	13.0
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°	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2	885.2
2.5°	880.8	877.6	873.2	868.9	864.6	861.3	858.1	858.1	855.9	852.6	850.5
5°	878.7	873.2	863.5	855.9	844.0	835.3	828.8	823.3	820.1	812.5	811.4
7.5°	875.4	868.9	854.8	839.6	820.1	804.9	789.7	778.9	768.0	759.3	757.2
10°	870.0	862.4	841.8	820.1	793.0	764.8	729.0	687.7	649.8	628.1	621.6
12.5°	870.0	860.2	833.1	803.8	764.8	695.3	604.2	513.1	442.6	411.1	402.5
15°	875.4	862.4	826.6	786.5	713.8	572.8	425.2	304.8	227.8	203.9	198.5
17.5°	880.8	862.4	816.8	762.6	620.5	415.5	241.9	160.5	135.6	130.2	130.2
20°	883.0	860.2	803.8	718.1	495.7	258.2	144.3	120.4	110.6	107.4	107.4
22.5°	891.7	861.3	794.1	654.1	360.1	151.9	113.9	100.9	91.1	87.9	87.9
25°	913.4	874.3	796.2	572.8	231.1	115.0	96.5	83.5	73.8	69.4	69.4
27.5°	948.1	903.6	808.2	478.4	145.4	98.7	81.4	67.3	59.7	55.3	55.3
30°	987.1	936.2	813.6	369.9	108.5	83.5	66.2	53.2	47.7	44.5	43.4
32.5°	1055.5	992.6	809.2	253.8	89.0	70.5	53.2	42.3	38.0	36.9	36.9
35°	1165.0	1091.3	800.6	159.5	73.8	56.4	42.3	34.7	31.5	30.4	29.3
37.5°	1313.7	1235.6	774.5	105.2	60.7	44.5	34.7	29.3	26.0	24.9	24.9
40°	1494.8	1400.4	724.6	80.3	52.1	35.8	29.3	24.9	22.8	21.7	21.7
42.5°	1702.0	1583.8	645.4	69.4	43.4	30.4	24.9	20.6	19.5	18.4	18.4
45°	1928.7	1775.8	535.9	61.8	36.9	24.9	20.6	18.4	16.3	16.3	15.2
47.5°	2169.5	1968.9	412.2	54.2	31.5	21.7	18.4	15.2	14.1	13.0	13.0
50°	2401.7	2141.3	289.6	46.6	26.0	18.4	15.2	13.0	11.9	10.8	10.8
52.5°	2565.5	2245.5	205.0	40.1	21.7	16.3	11.9	9.8	8.7	8.7	8.7
55°	2696.7	2310.6	143.2	33.6	18.4	14.1	9.8	7.6	7.6	6.5	6.5
57.5°	2820.4	2352.9	105.2	28.2	15.2	10.8	7.6	5.4	5.4	4.3	4.3
60°	2948.4	2375.7	80.3	22.8	13.0	8.7	5.4	4.3	3.3	3.3	3.3
62.5°	3077.5	2389.8	61.8	18.4	10.8	6.5	4.3	3.3	2.2	1.1	1.1
65°	3190.3	2394.1	47.7	14.1	8.7	4.3	3.3	1.1	0.0	0.0	0.0
67.5°	3223.9	2344.2	36.9	10.8	6.5	3.3	2.2	0.0	0.0	0.0	0.0
70°	3132.8	2211.9	28.2	8.7	5.4	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2780.3	1855.0	21.7	5.4	4.3	2.2	1.1	0.0	0.0	0.0	0.0
75°	1989.5	989.3	15.2	4.3	3.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	915.5	382.9	10.8	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
80°	179.0	95.5	4.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.2	16.3	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.1	5.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.4	2.2	1.1	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)