

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: INVUE

Report Number: P868482

Luminaire Tested: **EMM2-HTN-SA2A-722-U-T2U-HSS**

Issue Date: 08/22/2024



Test Information

Test Method: LM-79-08
Report Number: P868482
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/22/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM2-HTN-SA2A-722-U-T2U-HSS
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 70W 70CRI 2200K
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD
Light Source: (20) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

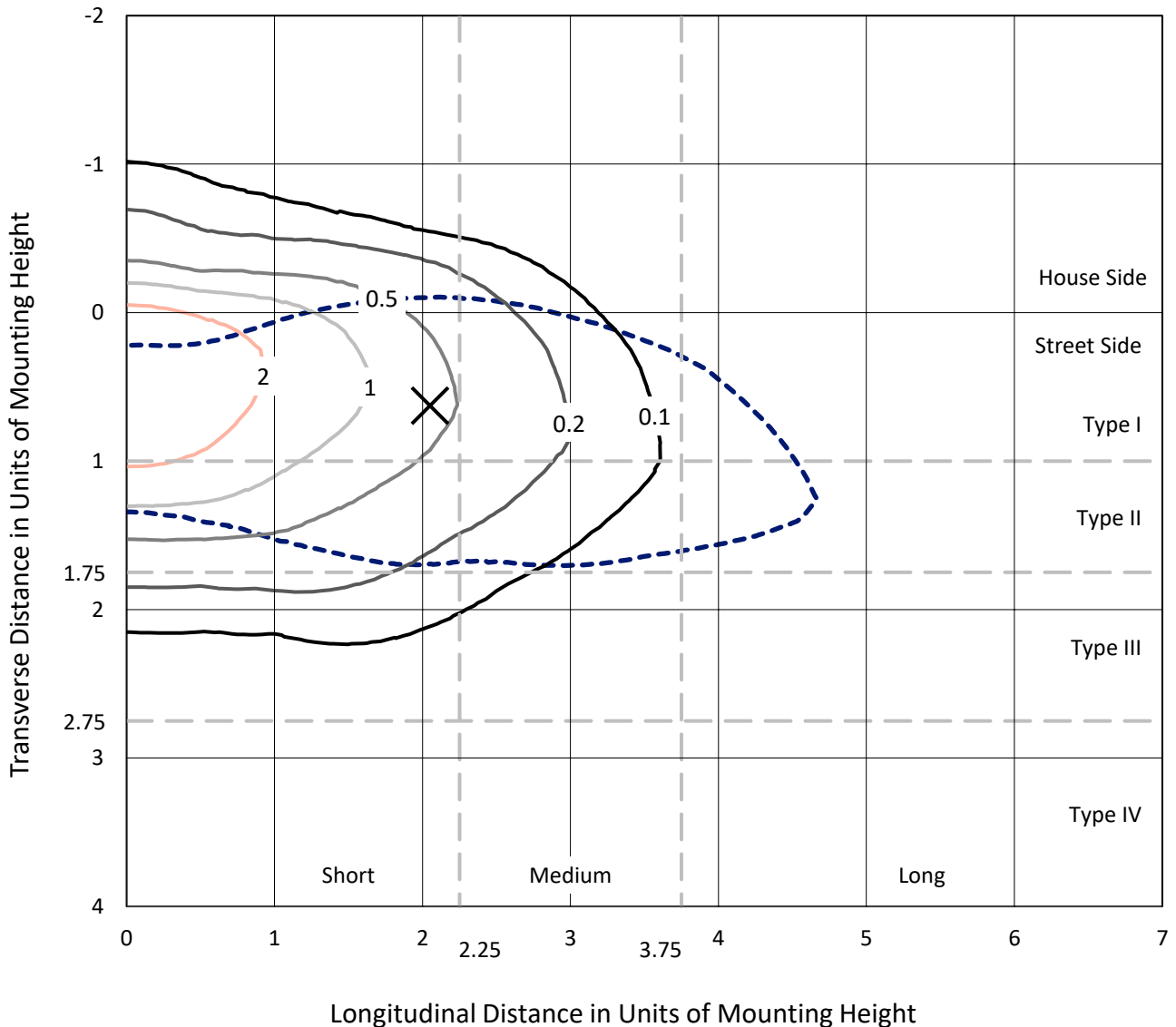
Lumens per Lamp: N/A
Luminaire Lumens: 5446.4 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 61
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 9.89%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Iso-Footcandle Lines of Horizontal Illumination

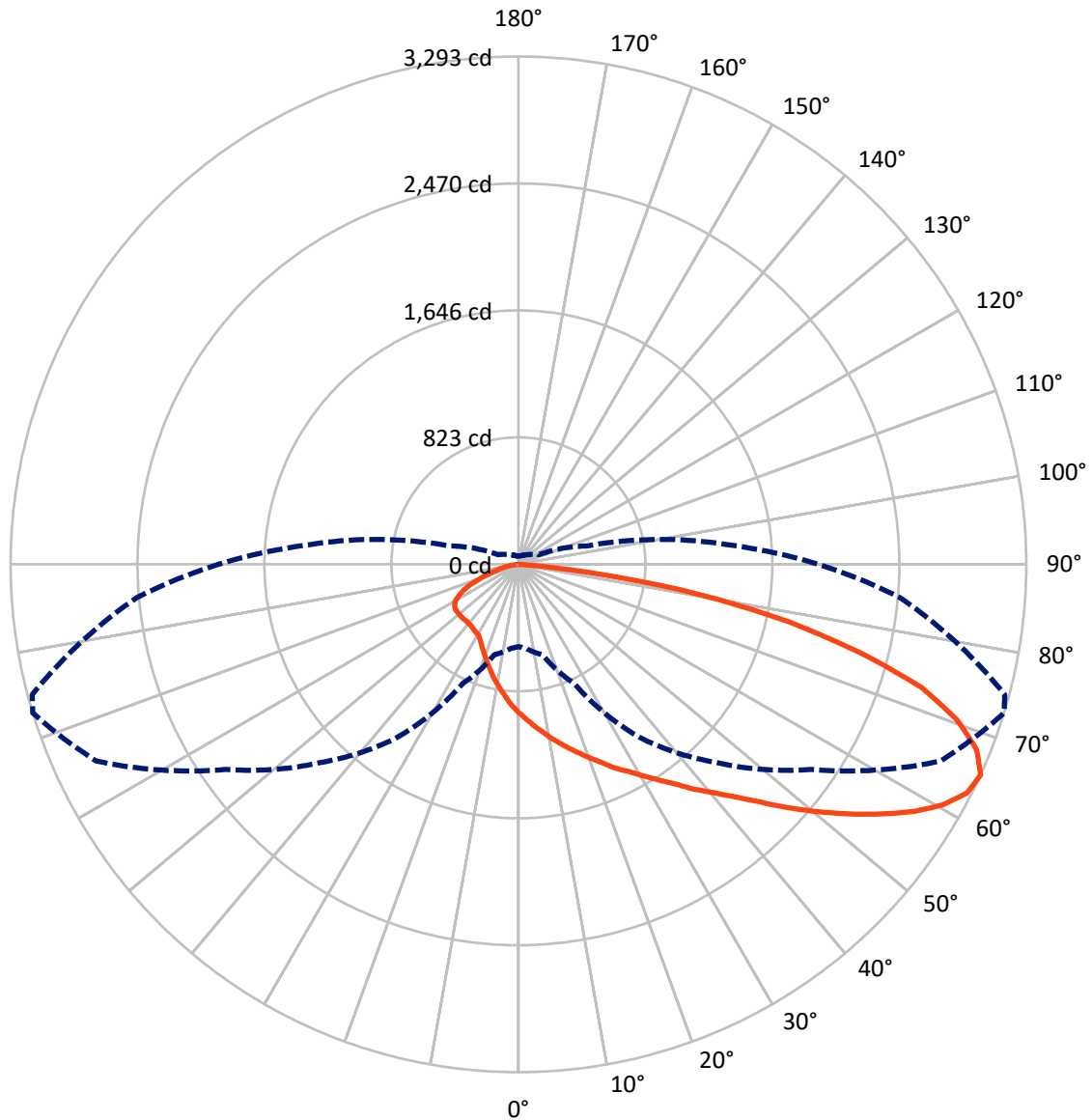
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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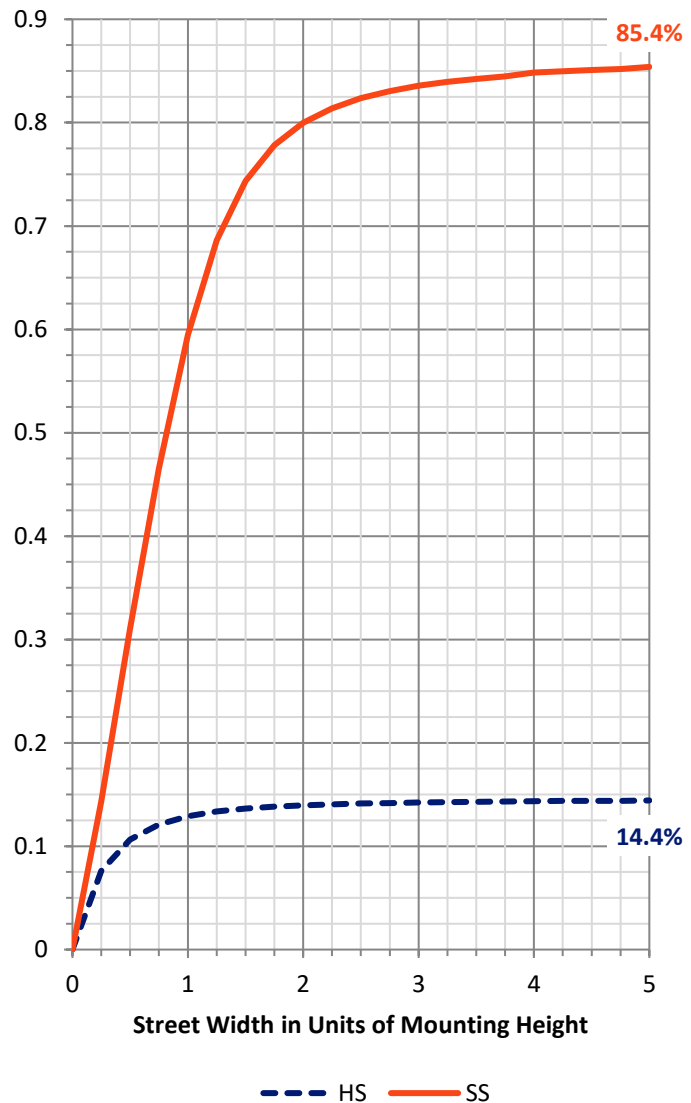
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	792.0	0.0	792.0
	% Fixture	14.5	0.0	14.5
Street Side	Lumens	4654.4	0.0	4654.4
	% Fixture	85.5	0.0	85.5
Total	Lumens	5446.4	0.0	5446.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.3	1.7
10°-20°	283.4	5.2
20°-30°	474.7	8.7
30°-40°	716.1	13.1
40°-50°	1011.8	18.6
50°-60°	1138.5	20.9
60°-70°	1020.9	18.7
70°-80°	620.9	11.4
80°-90°	86.9	1.6
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°	5446.4	100.0
0°-180°	5446.4	100.0



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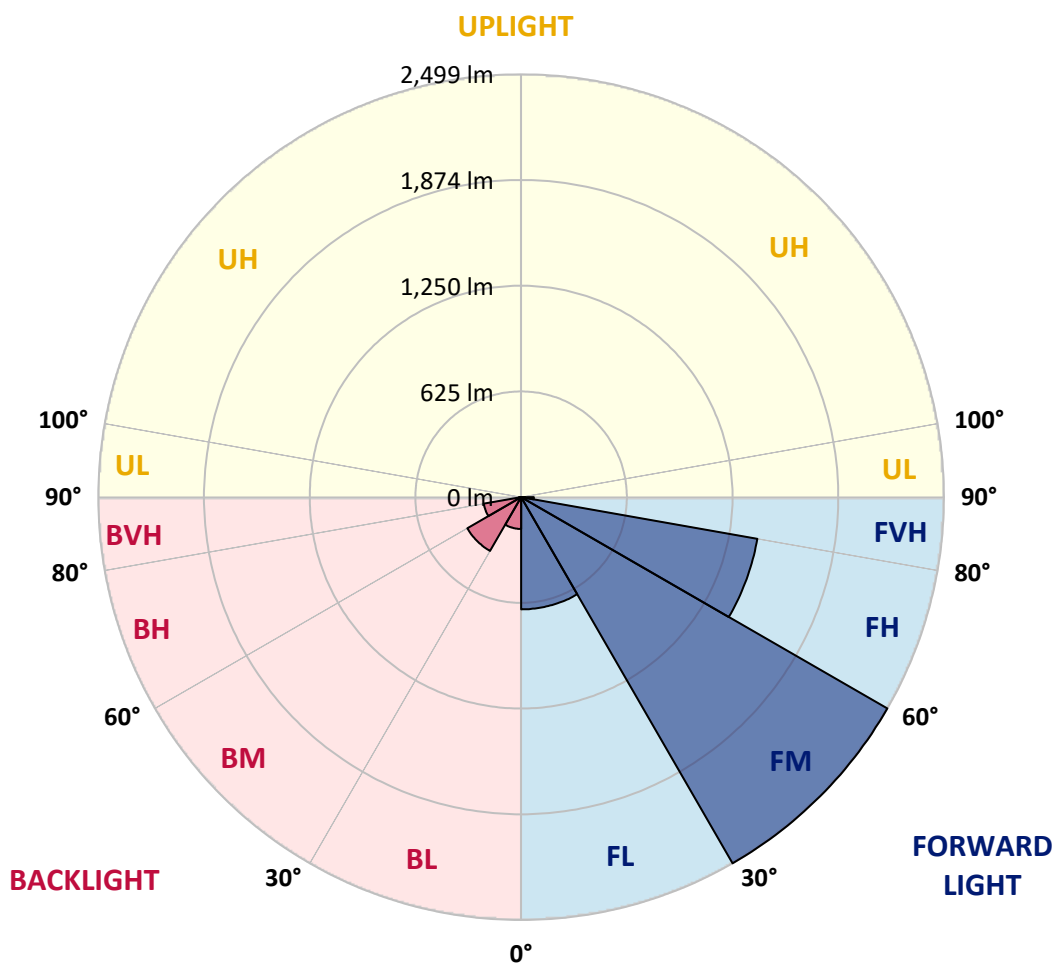
CATALOG NUMBER: EMM2-HTN-SA2A-722-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	663.3	12.2			
FM (30°-60°)	2499.1	45.9			
FH (60°-80°)	1417.5	26.0			G1/1800
FVH (80°-90°)	74.6	1.4			G1/100
BL (0°-30°)	188.1	3.5	B1/500		
BM (30°-60°)	367.2	6.7	B1/1000		
BH (60°-80°)	224.3	4.1	B1/500		G1/500
BVH (80°-90°)	12.2	0.2			G1/100
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°	65°	73°	75°	85°
0°	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2
2.5°	1115.2	1108.8	1099.2	1091.2	1076.8	1057.5	1041.5	1020.7	1006.3	1001.5	980.6
5°	1277.1	1269.0	1257.8	1238.6	1200.1	1177.7	1136.0	1088.0	1049.5	1041.5	993.4
7.5°	1443.7	1440.5	1414.9	1386.0	1339.5	1289.9	1225.8	1150.5	1094.4	1081.6	1007.9
10°	1584.7	1570.3	1555.9	1528.6	1478.9	1408.4	1325.1	1221.0	1142.5	1121.6	1022.3
12.5°	1669.6	1664.8	1652.0	1620.0	1571.9	1511.0	1411.6	1289.9	1188.9	1160.1	1036.7
15°	1732.1	1736.9	1724.1	1703.3	1653.6	1595.9	1499.8	1362.0	1238.6	1204.9	1052.7
17.5°	1791.4	1788.2	1786.6	1762.6	1717.7	1660.0	1562.3	1421.3	1288.3	1251.4	1068.8
20°	1825.1	1826.7	1823.4	1813.8	1770.6	1714.5	1623.2	1491.8	1342.7	1301.1	1089.6
22.5°	1842.7	1849.1	1855.5	1853.9	1818.6	1775.4	1680.8	1547.8	1398.8	1355.6	1115.2
25°	1853.9	1858.7	1873.1	1892.3	1860.3	1825.1	1744.9	1615.1	1464.5	1414.9	1145.7
27.5°	1863.5	1869.9	1887.5	1916.4	1890.7	1869.9	1801.0	1672.8	1520.6	1475.7	1180.9
30°	1926.0	1934.0	1934.0	1948.4	1919.6	1914.8	1863.5	1741.7	1591.1	1543.0	1225.8
32.5°	2091.0	2075.0	2046.2	2031.8	1962.9	1964.5	1924.4	1810.6	1666.4	1618.4	1281.9
35°	2233.6	2233.6	2198.4	2151.9	2041.4	2018.9	1994.9	1902.0	1748.1	1701.7	1355.6
37.5°	2371.4	2373.0	2336.2	2296.1	2169.6	2089.4	2076.6	1990.1	1849.1	1794.6	1432.5
40°	2458.0	2467.6	2458.0	2427.5	2305.7	2212.8	2156.7	2089.4	1945.2	1903.6	1520.6
42.5°	2472.4	2491.6	2526.9	2536.5	2405.1	2323.4	2259.3	2192.0	2060.6	2014.1	1621.6
45°	2435.5	2441.9	2520.5	2531.7	2478.8	2411.5	2368.2	2312.2	2198.4	2158.3	1733.7
47.5°	2334.6	2321.8	2349.0	2446.8	2467.6	2464.4	2475.6	2448.4	2358.6	2307.4	1857.1
50°	2118.3	2123.1	2211.2	2329.8	2401.9	2483.6	2555.7	2586.2	2520.5	2469.2	1990.1
52.5°	1724.1	1746.5	1914.8	2195.2	2320.2	2470.8	2613.4	2715.9	2688.7	2639.0	2121.5
55°	1416.5	1450.1	1618.4	1978.9	2208.0	2408.3	2647.0	2852.1	2856.9	2818.5	2241.7
57.5°	1108.8	1136.0	1313.9	1644.0	2047.8	2310.6	2651.9	2969.1	3023.6	2978.7	2347.4
60°	868.5	887.7	991.8	1370.0	1850.7	2171.2	2616.6	3062.0	3164.6	3130.9	2438.7
62.5°	658.6	673.0	765.9	1083.2	1608.7	2007.7	2498.0	3095.7	3263.9	3231.9	2490.0
65°	533.6	546.4	607.3	850.8	1370.0	1818.6	2318.6	3018.8	3292.8	3263.9	2483.6
67.5°	435.8	440.6	490.3	663.4	1158.5	1605.5	2055.8	2818.5	3204.7	3203.1	2409.9
70°	352.5	365.3	407.0	528.8	963.0	1360.4	1749.7	2504.4	3014.0	3030.0	2262.5
72.5°	299.6	302.8	339.7	437.4	785.1	1104.0	1448.5	2142.3	2733.6	2746.4	2031.8
75°	253.2	258.0	285.2	354.1	637.7	876.5	1164.9	1730.5	2288.1	2342.6	1711.3
77.5°	217.9	219.5	238.7	291.6	453.5	658.6	854.0	1297.9	1791.4	1829.9	1344.4
80°	171.4	174.7	195.5	230.7	315.7	427.8	589.7	887.7	1196.9	1240.2	931.0
82.5°	80.1	89.7	94.5	126.6	165.0	211.5	278.8	370.1	541.6	540.0	434.2
85°	8.0	6.4	6.4	9.6	14.4	14.4	17.6	20.8	41.7	49.7	38.5
87.5°	0.0	0.0	0.0	1.6	3.2	3.2	3.2	4.8	4.8	4.8	4.8
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°	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2	966.2
2.5°	971.0	956.6	931.0	906.9	890.9	878.1	857.2	844.4	834.8	822.0	820.4
5°	967.8	942.2	890.9	847.6	806.0	770.7	733.9	711.4	687.4	676.2	685.8
7.5°	971.0	929.3	849.2	783.5	721.0	665.0	616.9	586.5	564.0	552.8	554.4
10°	972.6	918.1	814.0	722.6	642.5	576.8	522.4	480.7	453.5	447.0	439.0
12.5°	969.4	903.7	778.7	663.4	567.2	495.1	431.0	399.0	371.7	358.9	358.9
15°	972.6	892.5	741.9	608.9	499.9	416.6	362.1	326.9	310.9	299.6	301.2
17.5°	972.6	882.9	706.6	556.0	434.2	357.3	307.6	278.8	262.8	256.4	254.8
20°	983.8	874.9	673.0	506.3	376.5	304.4	264.4	242.0	229.1	222.7	219.5
22.5°	991.8	868.5	642.5	458.3	328.5	266.0	232.3	211.5	201.9	198.7	198.7
25°	1006.3	866.9	615.3	411.8	290.0	237.1	206.7	190.7	182.7	179.5	179.5
27.5°	1027.1	870.1	589.7	371.7	261.2	208.3	185.9	173.1	168.2	166.6	165.0
30°	1057.5	884.5	573.6	341.3	233.9	190.7	169.8	161.8	158.6	157.0	157.0
32.5°	1097.6	910.1	567.2	325.3	217.9	176.3	158.6	152.2	149.0	149.0	147.4
35°	1147.3	939.0	562.4	310.9	206.7	166.6	150.6	144.2	142.6	142.6	142.6
37.5°	1206.6	969.4	554.4	301.2	200.3	158.6	144.2	137.8	137.8	137.8	137.8
40°	1272.2	1014.3	552.8	294.8	195.5	153.8	137.8	131.4	131.4	131.4	131.4
42.5°	1346.0	1062.3	551.2	290.0	192.3	150.6	131.4	125.0	125.0	125.0	125.0
45°	1435.7	1123.2	554.4	286.8	192.3	147.4	126.6	118.6	117.0	117.0	117.0
47.5°	1523.8	1180.9	557.6	283.6	189.1	142.6	120.2	112.2	110.6	109.0	109.0
50°	1618.4	1240.2	557.6	280.4	185.9	137.8	115.4	104.2	102.5	100.9	100.9
52.5°	1711.3	1289.9	559.2	275.6	177.9	129.8	107.4	97.7	94.5	92.9	91.3
55°	1801.0	1342.7	560.8	267.6	168.2	121.8	102.5	91.3	86.5	83.3	83.3
57.5°	1868.3	1386.0	552.8	251.6	155.4	113.8	94.5	83.3	76.9	73.7	73.7
60°	1932.4	1413.3	538.4	227.5	142.6	105.8	88.1	75.3	68.9	65.7	65.7
62.5°	1958.0	1418.1	504.7	185.9	126.6	97.7	80.1	68.9	64.1	62.5	62.5
65°	1943.6	1397.2	459.9	147.4	112.2	88.1	73.7	64.1	57.7	52.9	52.9
67.5°	1865.1	1325.1	399.0	117.0	97.7	80.1	67.3	57.7	51.3	46.5	46.5
70°	1716.1	1209.8	310.9	92.9	84.9	70.5	60.9	52.9	46.5	41.7	41.7
72.5°	1496.6	1049.5	225.9	78.5	73.7	62.5	54.5	48.1	41.7	38.5	38.5
75°	1233.8	809.2	160.2	67.3	65.7	56.1	49.7	43.3	38.5	35.3	35.3
77.5°	926.1	564.0	125.0	59.3	57.7	51.3	44.9	40.1	35.3	33.6	32.0
80°	616.9	349.3	94.5	44.9	43.3	40.1	36.9	33.6	28.8	25.6	25.6
82.5°	275.6	147.4	48.1	25.6	22.4	19.2	16.0	11.2	11.2	9.6	9.6
85°	28.8	19.2	9.6	6.4	6.4	4.8	4.8	4.8	3.2	3.2	3.2
87.5°	4.8	4.8	3.2	3.2	3.2	1.6	1.6	1.6	1.6	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-157-2

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-722-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-722-U-5WQ-2

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-157-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/20/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Streetworks
 Catalog Number: **MEM2-HTN-SA-40-722-U-5WQ-2**
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

Spectral Parameters

CCT (K): 2253
 CIE u': 0.2868
 CIE v': 0.5332
 Duv: -0.0014
 CIE x: 0.4974
 CIE y: 0.4110
 CIE z: 0.0915
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 587
 Purity: 72.69432
 R_f: 76.9
 R_g: 92.7

CRI (Ra):	70.6		
R1:	68.4	R9:	-36.0
R2:	88.7	R10:	78.2
R3:	85.4	R11:	61.0
R4:	63.5	R12:	74.2
R5:	69.0	R13:	72.8
R6:	88.9	R14:	92.2
R7:	68.5	R15:	58.0
R8:	32.0		



Test Conditions

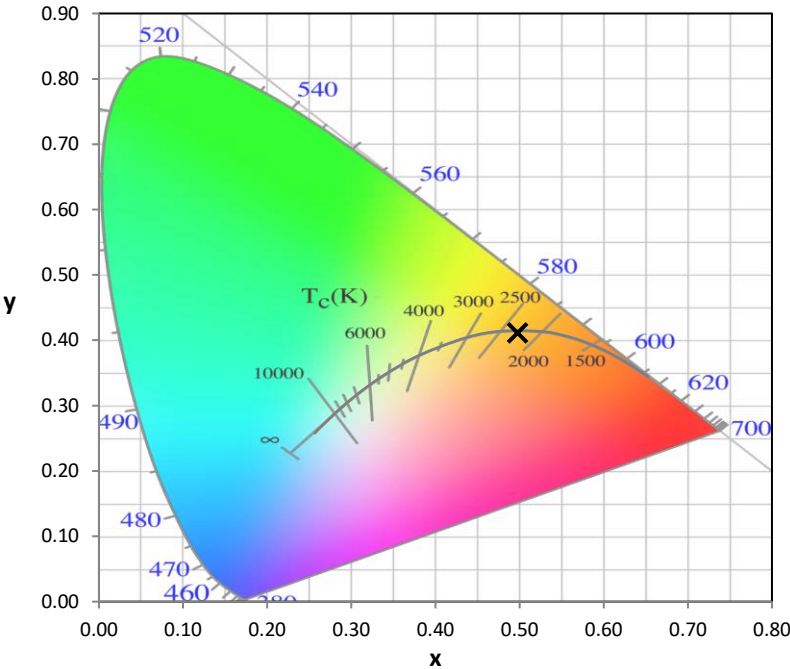
Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 24.1

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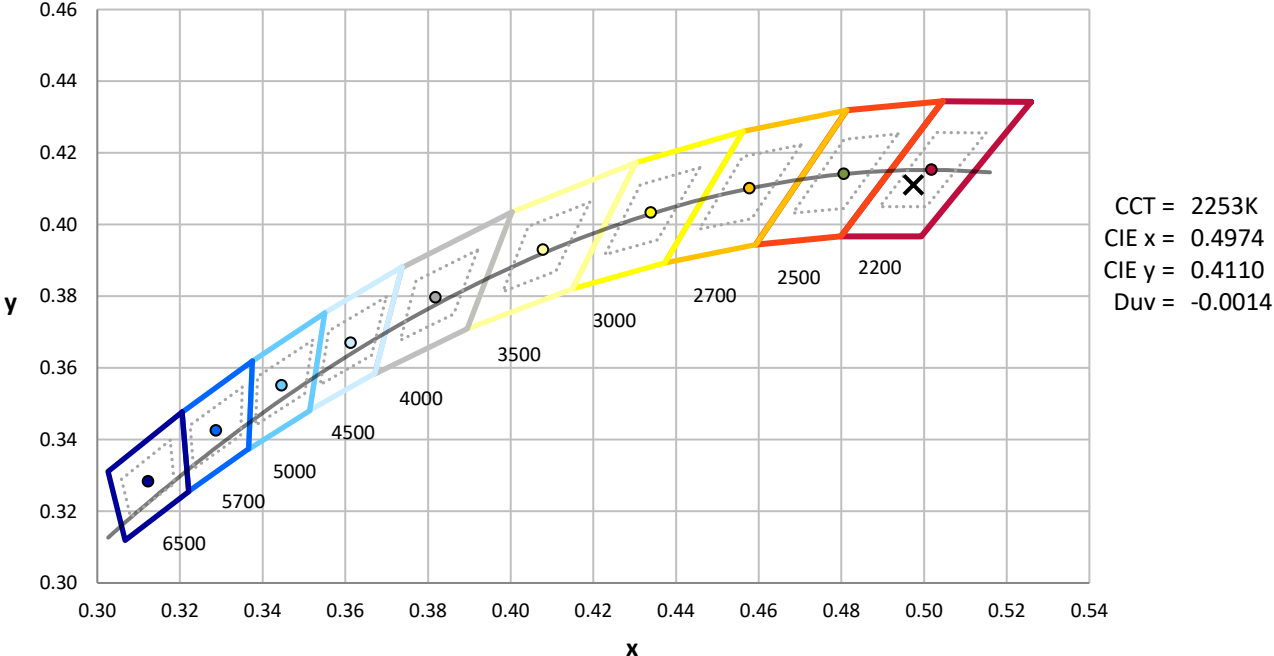
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2200K 4-step quadrangle

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Photopic Flux vs. Wavelength

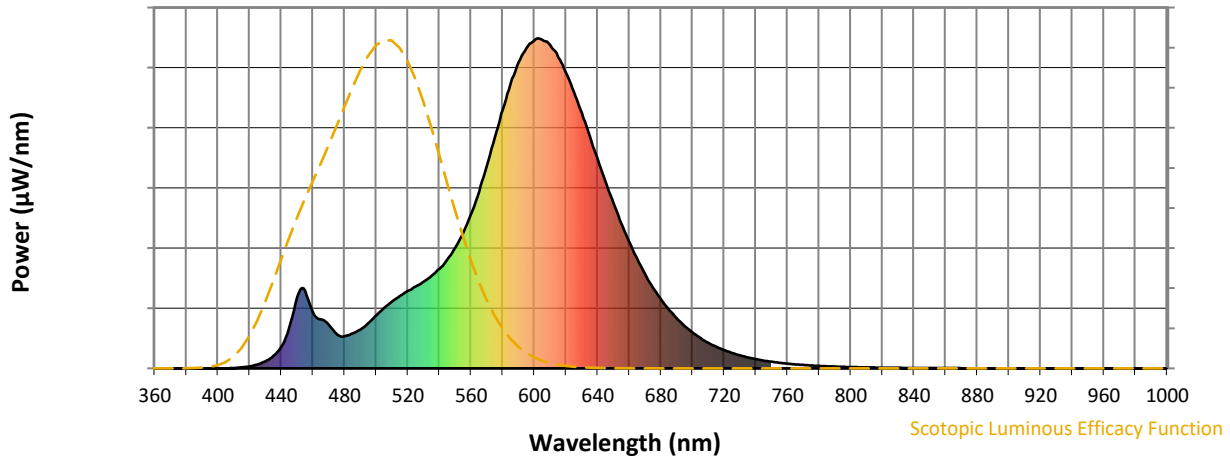


Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 0.96

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



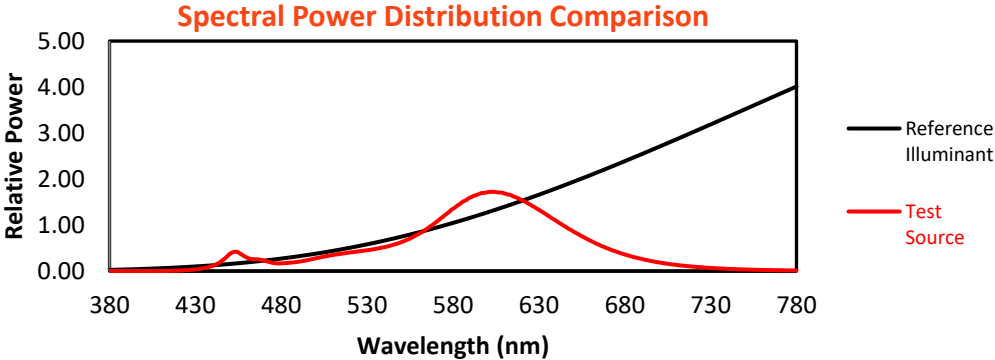
Melanopic Lumens: NR

M/P: 1.71

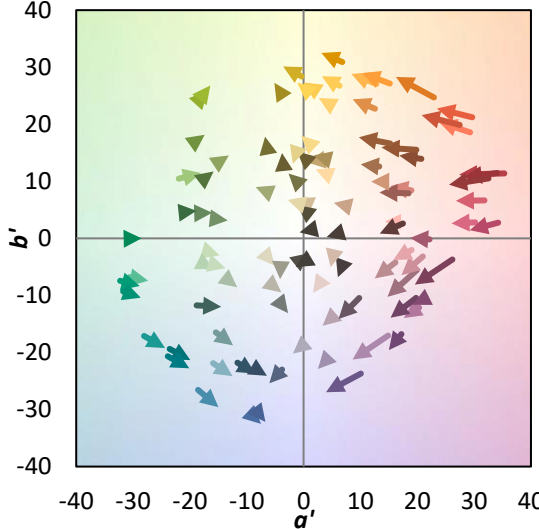
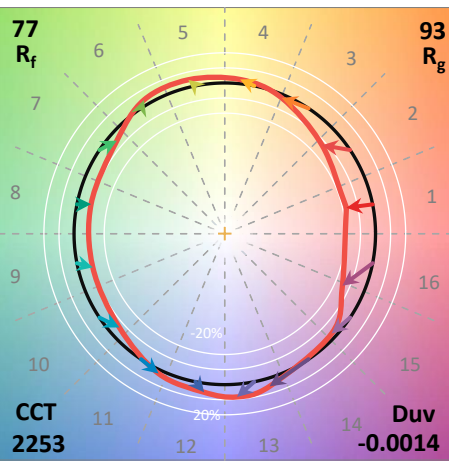
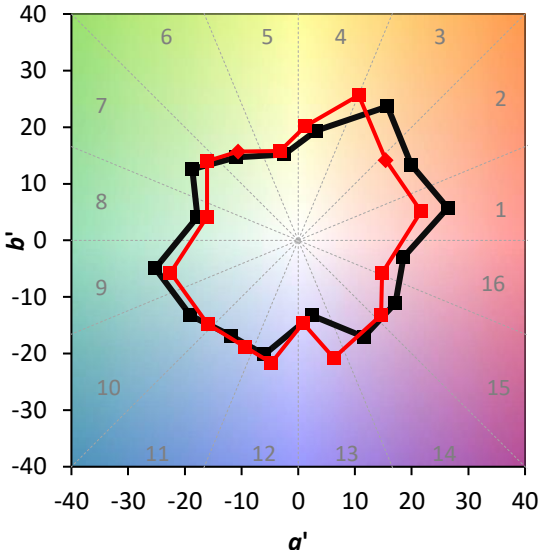
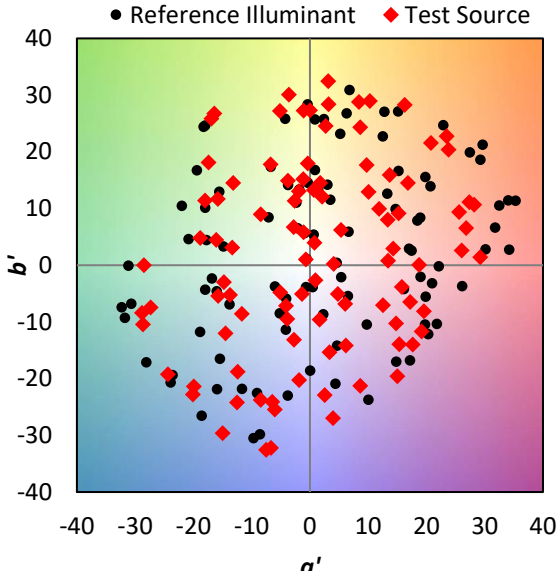
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

Summary

$R_f = 76.9$
 $R_g = 92.7$
 CIE $R_a = 70.6$
 $R_9 = -36.0$



Color Vector Graphics



Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 87	CES26 = 76	CES51 = 88	CES76 = 78
CES02 = 65	CES27 = 94	CES52 = 85	CES77 = 75
CES03 = 32	CES28 = 93	CES53 = 80	CES78 = 79
CES04 = 72	CES29 = 81	CES54 = 86	CES79 = 82
CES05 = 51	CES30 = 91	CES55 = 83	CES80 = 81
CES06 = 52	CES31 = 83	CES56 = 77	CES81 = 51
CES07 = 44	CES32 = 75	CES57 = 75	CES82 = 92
CES08 = 42	CES33 = 88	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 88	CES59 = 84	CES84 = 90
CES10 = 79	CES35 = 94	CES60 = 91	CES85 = 65
CES11 = 62	CES36 = 90	CES61 = 82	CES86 = 48
CES12 = 68	CES37 = 97	CES62 = 91	CES87 = 76
CES13 = 45	CES38 = 98	CES63 = 86	CES88 = 78
CES14 = 75	CES39 = 97	CES64 = 70	CES89 = 61
CES15 = 72	CES40 = 94	CES65 = 71	CES90 = 80
CES16 = 48	CES41 = 95	CES66 = 71	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 70	CES92 = 51
CES18 = 57	CES43 = 80	CES68 = 74	CES93 = 68
CES19 = 74	CES44 = 99	CES69 = 84	CES94 = 44
CES20 = 68	CES45 = 83	CES70 = 72	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 75	CES96 = 75
CES22 = 81	CES47 = 88	CES72 = 89	CES97 = 76
CES23 = 92	CES48 = 73	CES73 = 68	CES98 = 72
CES24 = 92	CES49 = 82	CES74 = 85	CES99 = 63
CES25 = 73	CES50 = 87	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)