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: McGRAW-EDISON

Report Number: P821314

Luminaire Tested: **TT-D4-740-24VDC-MQ-UPL**

Issue Date: 7/23/2020

Report Generated By 670245763

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P821314
	REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-1) AND
Test Lab:	INNOVATION CENTER
Issue Date:	7/23/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D4-740-24VDC-MQ-UPL
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
	4000K, 70 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8891.7 lumens
Efficiency:	N/A
Efficacy:	156.0 lumens/watt
Luminous Opening:	Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification:	Type V - Short
BUG Rating:	B3 - U4 - G2

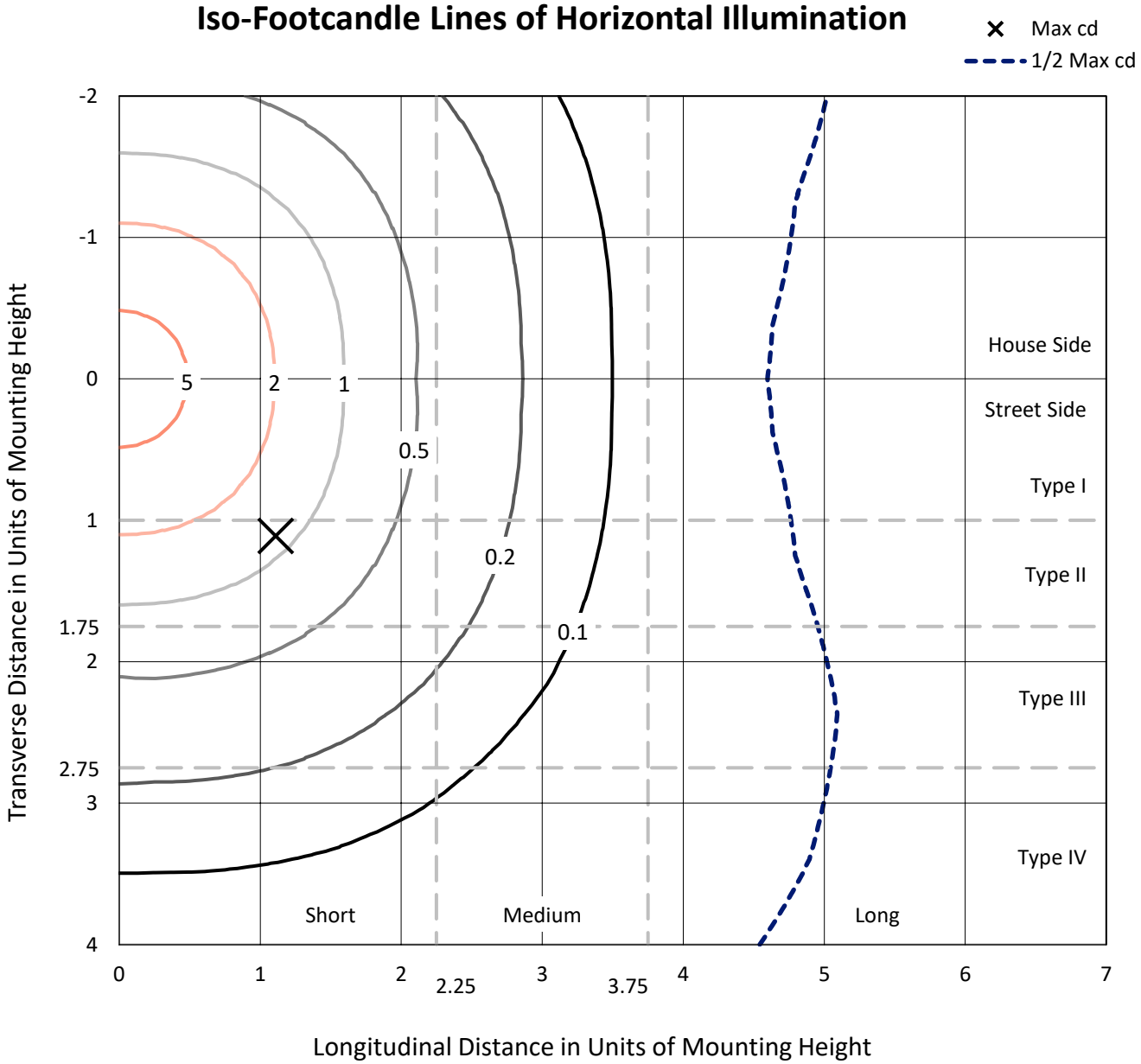
Input Watts (W):	57
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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Scaled Data Report

REPORT NUMBER: P821314
CATALOG NUMBER: TT-D4-740-24VDC-MQ-UPL

Iso-Footcandle Lines of Horizontal Illumination



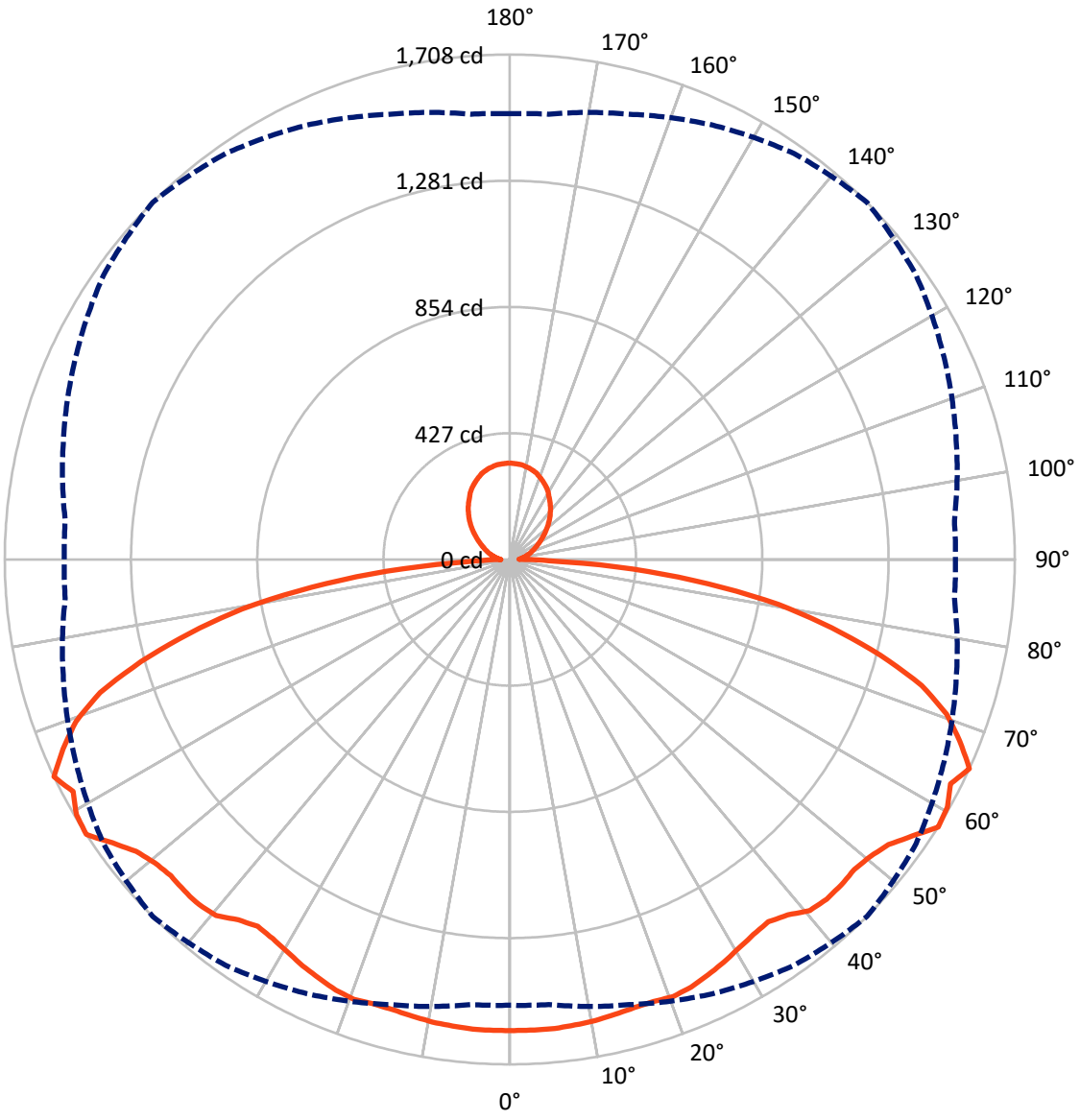
Based on 15 foot mounting height. Maximum calculated value = 7.1 fc
Type V - Short - N/A

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REPORT NUMBER: P821314
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Luminous Intensity Polar Plot



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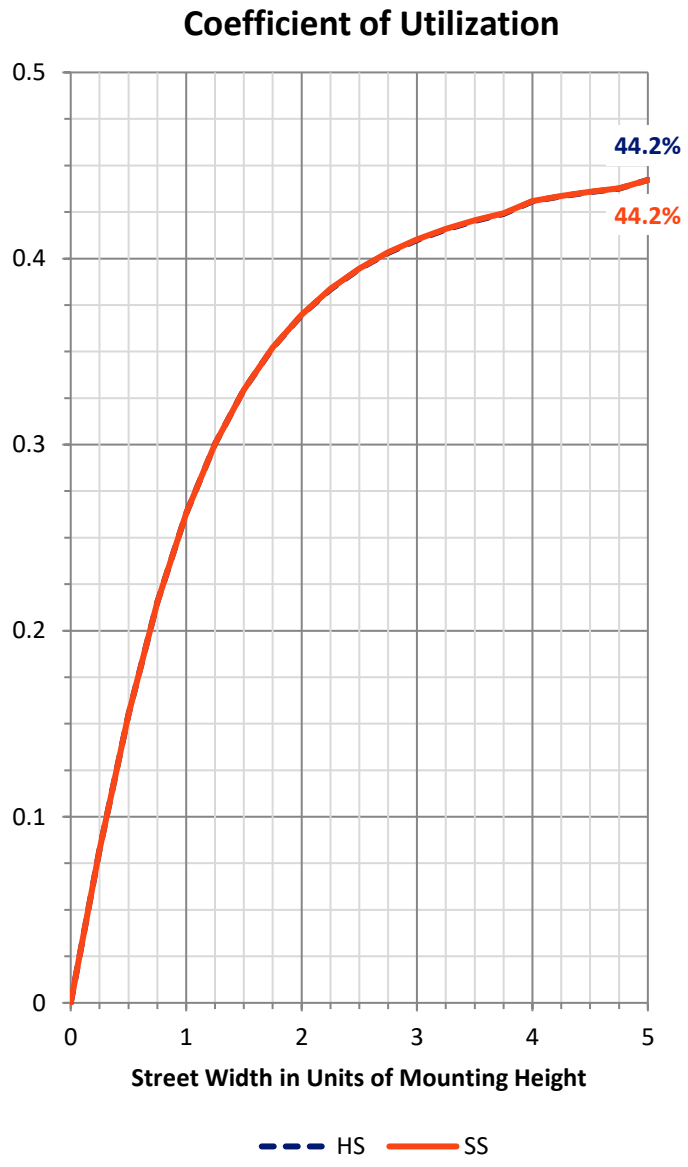
REPORT NUMBER: P821314
CATALOG NUMBER: TT-D4-740-24VDC-MQ-UPL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4003.1	442.7	4445.9
	% Fixture	45.0	5.0	50.0
Street Side	Lumens	4003.1	442.7	4445.9
	% Fixture	45.0	5.0	50.0
Total	Lumens	8006.2	885.5	8891.7
	% Fixture	90.0	10.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	1.7
10°-20°	446.7	5.0
20°-30°	717.8	8.1
30°-40°	947.6	10.7
40°-50°	1185.5	13.3
50°-60°	1410.1	15.9
60°-70°	1529.4	17.2
70°-80°	1217.3	13.7
80°-90°	400.0	4.5
90°-100°	45.4	0.5
100°-110°	70.3	0.8
110°-120°	97.7	1.1
120°-130°	126.6	1.4
130°-140°	147.6	1.7
140°-150°	149.5	1.7
150°-160°	129.8	1.5
160°-170°	87.7	1.0
170°-180°	30.8	0.3
0°-90°	8006.2	90.0
0°-180°	8891.7	100.0



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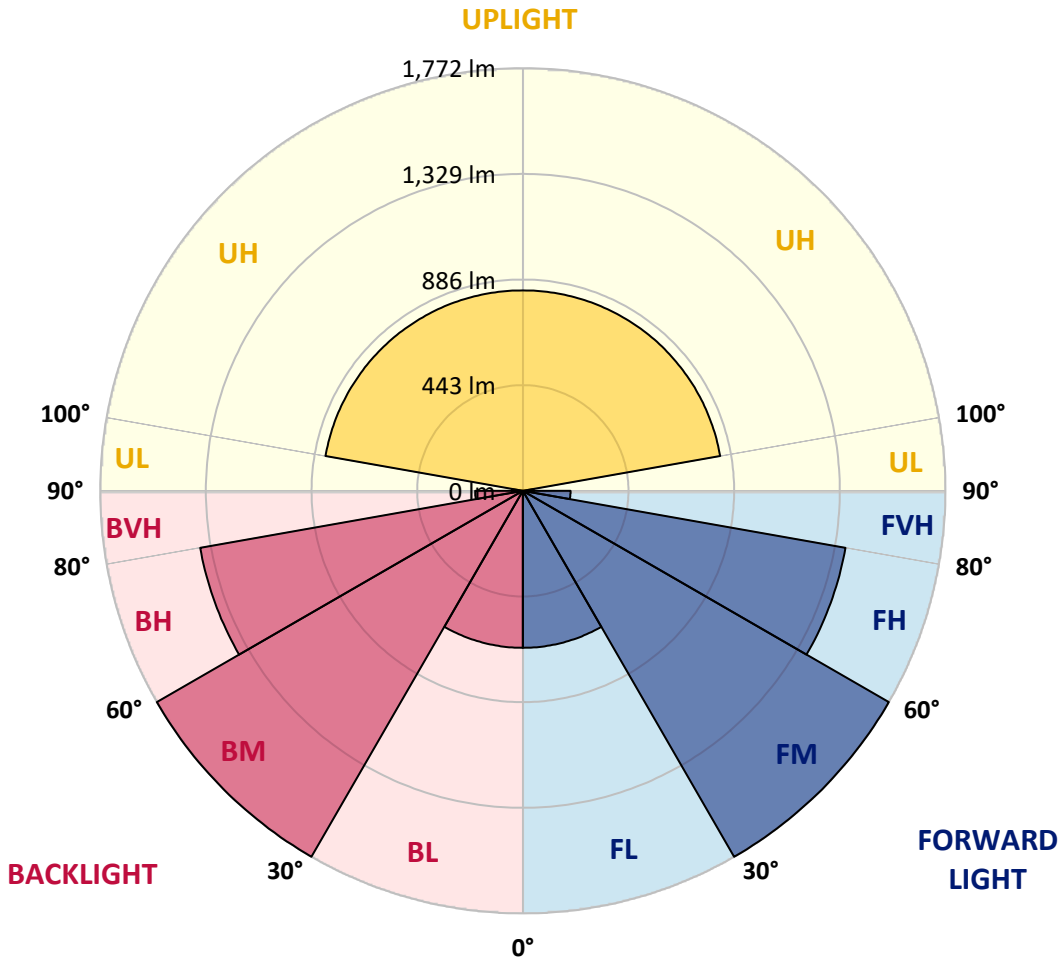
Scaled Data Report

REPORT NUMBER: P821314
CATALOG NUMBER: TT-D4-740-24VDC-MQ-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	658.2	7.4			
FM	(30°-60°)	1771.6	19.9			
FH	(60°-80°)	1373.4	15.4			G1/1800
FVH	(80°-90°)	200.0	2.2			G2/225
BL	(0°-30°)	658.2	7.4	B2/1000		
BM	(30°-60°)	1771.6	19.9	B2/2500		
BH	(60°-80°)	1373.4	15.4	B3/2500		G1/1800
BVH	(80°-90°)	200.0	2.2			G2/225
UL	(90°-100°)	45.4	0.5		U2/50	
UH	(100°-180°)	840.1	9.4		U4/1000	

BUG Rating: B3-U4-G2
Type V Short



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REPORT NUMBER: P821314
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1596.1	1594.9	1596.1	1594.9	1594.9	1593.8	1594.9	1594.9	1594.9	1594.9	1594.9
5°	1594.9	1593.8	1593.8	1594.9	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
7.5°	1590.2	1590.2	1591.4	1590.2	1590.2	1590.2	1590.2	1590.2	1590.2	1591.4	1591.4
10°	1586.6	1585.4	1586.6	1586.6	1585.4	1586.6	1585.4	1586.6	1586.6	1586.6	1586.6
12.5°	1581.8	1580.7	1581.8	1581.8	1580.7	1579.5	1580.7	1580.7	1581.8	1581.8	1581.8
15°	1573.5	1573.5	1575.9	1574.7	1574.7	1573.5	1575.9	1574.7	1573.5	1574.7	1574.7
17.5°	1567.6	1567.6	1569.9	1572.3	1572.3	1572.3	1572.3	1571.1	1568.8	1569.9	1567.6
20°	1568.8	1569.9	1571.1	1574.7	1577.1	1578.3	1578.3	1574.7	1571.1	1572.3	1571.1
22.5°	1565.2	1564.0	1565.2	1567.6	1571.1	1571.1	1571.1	1566.4	1565.2	1564.0	1564.0
25°	1550.9	1550.9	1553.3	1555.7	1558.0	1556.9	1558.0	1555.7	1553.3	1550.9	1550.9
27.5°	1534.2	1534.2	1537.8	1540.2	1542.6	1542.6	1541.4	1539.0	1537.8	1535.4	1534.2
30°	1517.6	1517.6	1521.1	1523.5	1527.1	1525.9	1525.9	1522.3	1518.8	1516.4	1516.4
32.5°	1499.7	1498.5	1502.1	1508.1	1512.8	1512.8	1512.8	1505.7	1500.9	1498.5	1497.3
35°	1484.2	1484.2	1489.0	1499.7	1505.7	1505.7	1503.3	1498.5	1487.8	1484.2	1484.2
37.5°	1479.5	1483.1	1496.2	1511.6	1523.5	1525.9	1522.3	1509.2	1495.0	1484.2	1480.7
40°	1495.0	1498.5	1515.2	1540.2	1558.0	1561.6	1558.0	1539.0	1514.0	1497.3	1496.2
42.5°	1497.3	1499.7	1520.0	1548.5	1565.2	1571.1	1565.2	1546.1	1518.8	1498.5	1497.3
45°	1489.0	1490.2	1514.0	1543.8	1564.0	1571.1	1564.0	1541.4	1512.8	1490.2	1489.0
47.5°	1478.3	1480.7	1506.9	1537.8	1562.8	1567.6	1561.6	1536.6	1504.5	1481.9	1478.3
50°	1470.0	1477.1	1500.9	1535.4	1565.2	1579.5	1565.2	1531.9	1499.7	1474.7	1470.0
52.5°	1474.7	1477.1	1508.1	1556.9	1597.3	1603.3	1596.1	1556.9	1505.7	1477.1	1473.5
55°	1489.0	1499.7	1533.0	1603.3	1640.2	1650.9	1635.4	1600.9	1534.2	1499.7	1489.0
57.5°	1508.1	1511.6	1559.2	1621.1	1675.9	1708.0	1677.1	1619.9	1562.8	1509.2	1506.9
60°	1492.6	1481.9	1541.4	1614.0	1687.8	1700.9	1683.0	1615.2	1539.0	1480.7	1491.4
62.5°	1450.9	1458.1	1506.9	1606.8	1658.0	1672.3	1653.3	1606.8	1504.5	1464.0	1447.3
65°	1417.6	1460.4	1514.0	1585.4	1667.5	1708.0	1668.7	1583.0	1516.4	1453.3	1414.0
67.5°	1371.2	1379.5	1459.3	1547.3	1621.1	1641.4	1619.9	1548.5	1452.1	1373.6	1379.5
70°	1292.6	1280.7	1361.7	1464.0	1534.2	1566.4	1536.6	1459.3	1358.1	1278.3	1289.0
72.5°	1162.9	1170.0	1245.0	1353.3	1425.9	1456.9	1427.1	1345.0	1242.6	1177.2	1170.0
75°	1027.2	1035.5	1108.1	1206.9	1280.7	1293.8	1285.5	1201.0	1110.5	1034.3	1027.2
77.5°	872.5	880.8	940.3	1048.6	1092.7	1112.9	1095.0	1054.6	937.9	879.6	870.1
80°	701.1	698.7	751.1	843.9	898.6	921.3	898.6	846.3	748.7	703.4	688.0
82.5°	501.1	503.5	552.3	616.6	668.9	676.1	665.4	622.5	547.5	509.4	488.0
85°	278.5	289.2	324.9	372.5	407.1	419.0	401.1	360.6	323.7	294.0	284.5
87.5°	66.7	72.6	84.5	107.1	120.2	132.1	120.2	111.9	79.7	72.6	66.7
90°	32.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
92.5°	37.0	37.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
95°	42.0	42.0	42.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
97.5°	48.0	48.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
100°	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
102.5°	60.0	59.0	60.0	60.0	59.0	59.0	59.0	60.0	60.0	60.0	59.0
105°	66.0	66.0	66.0	66.0	66.0	66.0	66.0	67.0	66.0	66.0	66.0
107.5°	73.0	73.0	73.0	74.0	74.0	74.0	74.0	74.0	73.0	74.0	73.0
110°	80.0	80.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0

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Scaled Data Report

REPORT NUMBER: P821314
CATALOG NUMBER: TT-D4-740-24VDC-MQ-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	89.0	89.0	89.0	89.0	89.0	*90.0*	90.0	90.0	90.0	90.0	89.0
115°	97.0	97.0	98.0	98.0	98.0	*98.0*	99.0	99.0	98.0	98.0	98.0
117.5°	107.0	107.0	107.0	107.0	107.0	*108.0*	108.0	108.0	108.0	108.0	107.0
120°	117.0	117.0	117.0	118.0	118.0	*118.0*	119.0	119.0	118.0	118.0	118.0
122.5°	129.0	128.0	129.0	129.0	129.0	*129.0*	130.0	130.0	130.0	130.0	129.0
125°	140.0	140.0	141.0	141.0	141.0	*141.0*	142.0	142.0	142.0	142.0	141.0
127.5°	153.0	153.0	153.0	153.0	153.0	*154.0*	154.0	154.0	154.0	154.0	154.0
130°	165.0	165.0	166.0	166.0	166.0	*166.0*	167.0	167.0	167.0	167.0	166.0
132.5°	179.0	178.0	179.0	178.0	178.0	*179.0*	179.0	180.0	179.0	180.0	179.0
135°	191.0	191.0	191.0	191.0	191.0	*192.0*	192.0	192.0	192.0	192.0	192.0
137.5°	204.0	203.0	204.0	203.0	203.0	*204.0*	204.0	204.0	204.0	204.0	204.0
140°	216.0	215.0	216.0	215.0	216.0	*216.0*	216.0	216.0	216.0	216.0	216.0
142.5°	228.0	227.0	228.0	227.0	227.0	*228.0*	228.0	228.0	228.0	228.0	228.0
145°	239.0	239.0	239.0	238.0	239.0	*239.0*	239.0	239.0	239.0	239.0	239.0
147.5°	250.0	249.0	250.0	249.0	249.0	*250.0*	250.0	250.0	250.0	250.0	250.0
150°	263.0	262.0	263.0	262.0	263.0	*263.0*	263.0	263.0	263.0	263.0	263.0
152.5°	273.0	273.0	273.0	273.0	273.0	*273.0*	273.0	273.0	273.0	273.0	273.0
155°	282.0	282.0	283.0	282.0	282.0	*282.0*	283.0	282.0	282.0	282.0	282.0
157.5°	290.0	290.0	290.0	290.0	290.0	*290.0*	291.0	291.0	290.0	291.0	290.0
160°	298.0	298.0	299.0	298.0	298.0	*298.0*	299.0	298.0	298.0	298.0	298.0
162.5°	306.0	305.0	306.0	305.0	306.0	*306.0*	306.0	306.0	306.0	306.0	306.0
165°	311.0	311.0	312.0	311.0	311.0	*311.0*	312.0	311.0	311.0	311.0	311.0
167.5°	316.0	315.0	316.0	316.0	316.0	*316.0*	316.0	316.0	316.0	316.0	316.0
170°	319.0	319.0	320.0	319.0	319.0	*319.0*	320.0	319.0	319.0	319.0	319.0
172.5°	323.0	323.0	323.0	323.0	323.0	*323.0*	323.0	323.0	323.0	323.0	323.0
175°	324.0	324.0	325.0	324.0	325.0	*324.0*	325.0	324.0	324.0	324.0	324.0
177.5°	325.0	325.0	326.0	325.0	325.0	*325.0*	325.0	325.0	325.0	325.0	325.0
180°	326.0	326.0	326.0	326.0	326.0	*326.0*	326.0	326.0	326.0	326.0	326.0

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Peachtree City, GA 30269

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-5

Test Date: 09/24/2024

Luminaire Tested: MEM2-HTN-VA-30-740-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-740-U-WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

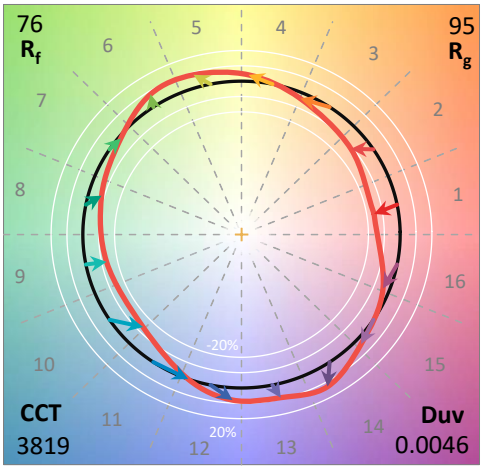
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-5
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	09/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MEM2-HTN-VA-30-740-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	3819	CRI (Ra):	72.9		
CIE u':	0.2261	R1:	70.1	R9:	-21.5
CIE v':	0.5108	R2:	78.4	R10:	48.5
Duv:	0.0046	R3:	85.0	R11:	68.4
CIE x:	0.3926	R4:	72.9	R12:	39.0
CIE y:	0.3942	R5:	69.1	R13:	71.1
CIE z:	0.2132	R6:	69.2	R14:	91.3
Peak Wavelength (nm):	450	R7:	82.8	R15:	63.2
Dominant Wavelength (nm):	577	R8:	55.4		
Purity:	36.15483				

Rf:	75.6
Rg:	94.8



Test Conditions

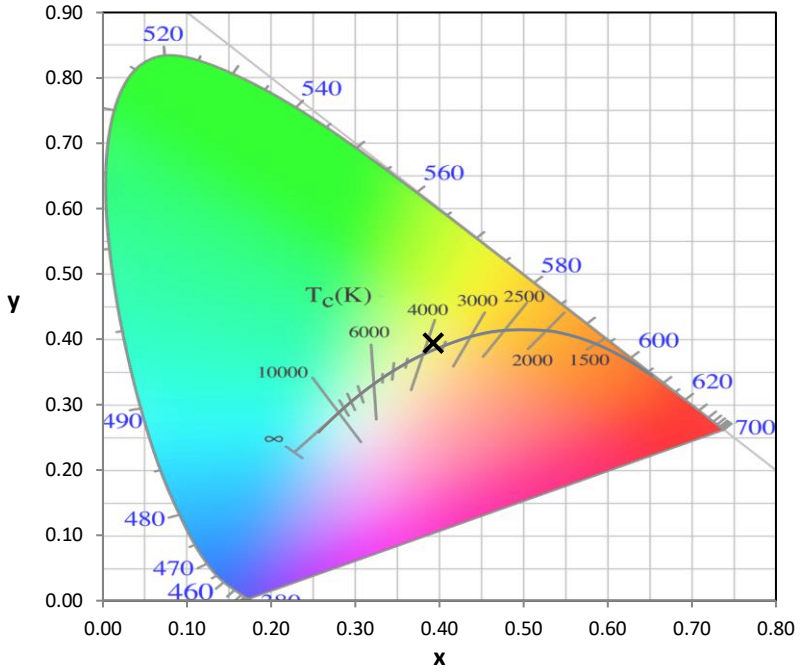
Stabilization Time:	30M
Operation Time:	1H 30M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-5

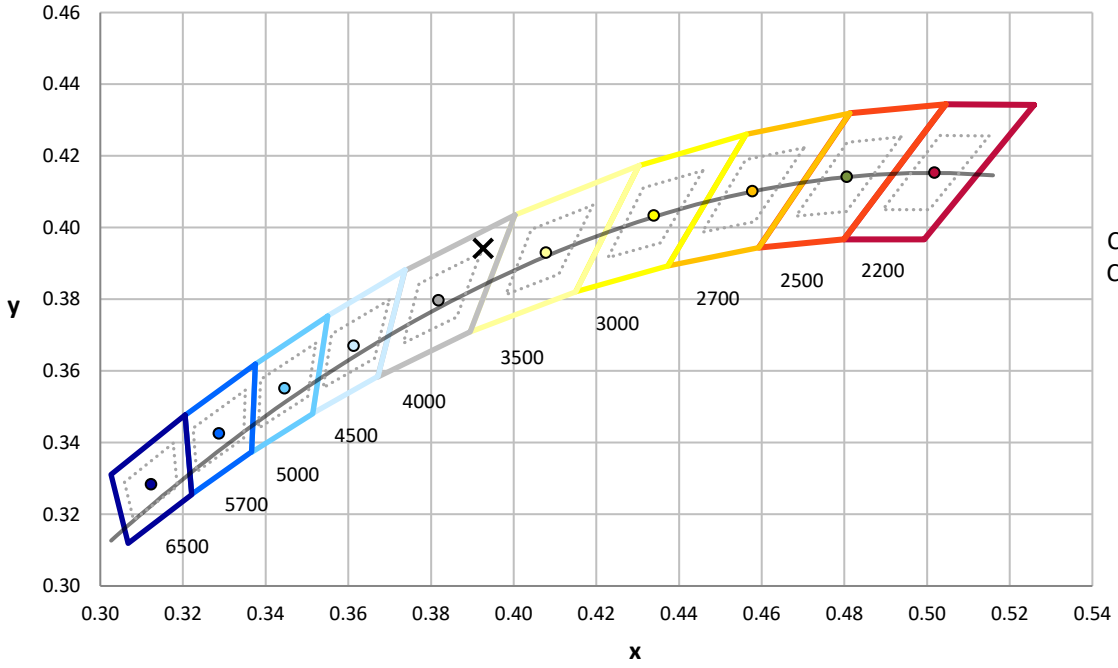
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-176-5

CIE 1931 Chromaticity Diagram



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

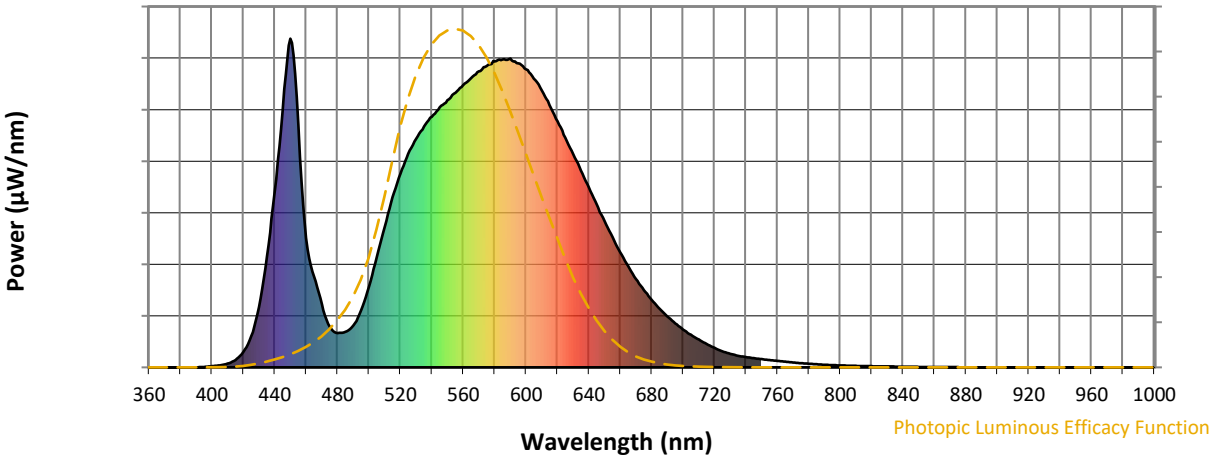


CCT = 3819K
CIE x = 0.3926
CIE y = 0.3942
Duv = 0.0046

Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2407-176-5

Photopic Flux vs. Wavelength

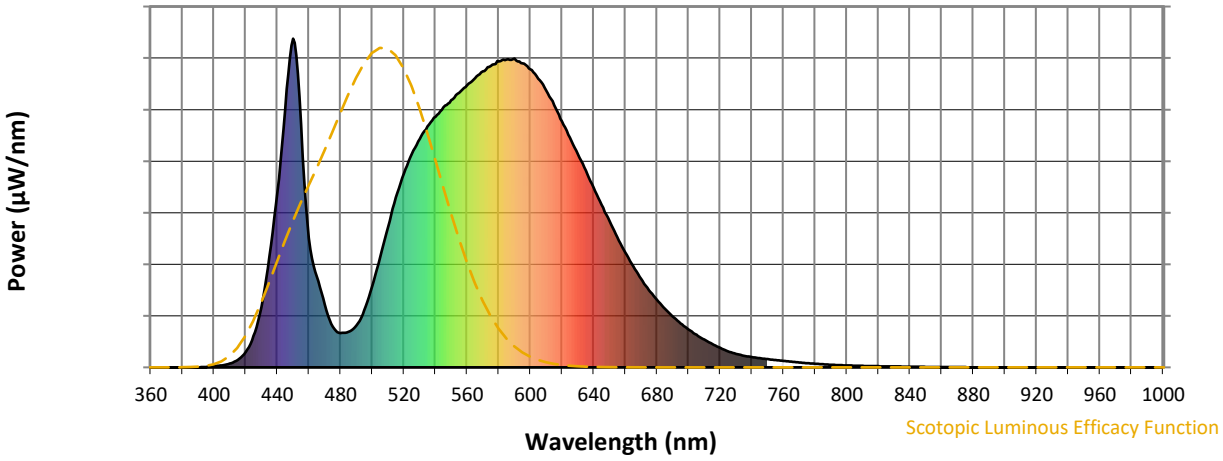


Photopic Lumens: NR

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Scotopic Flux vs. Wavelength

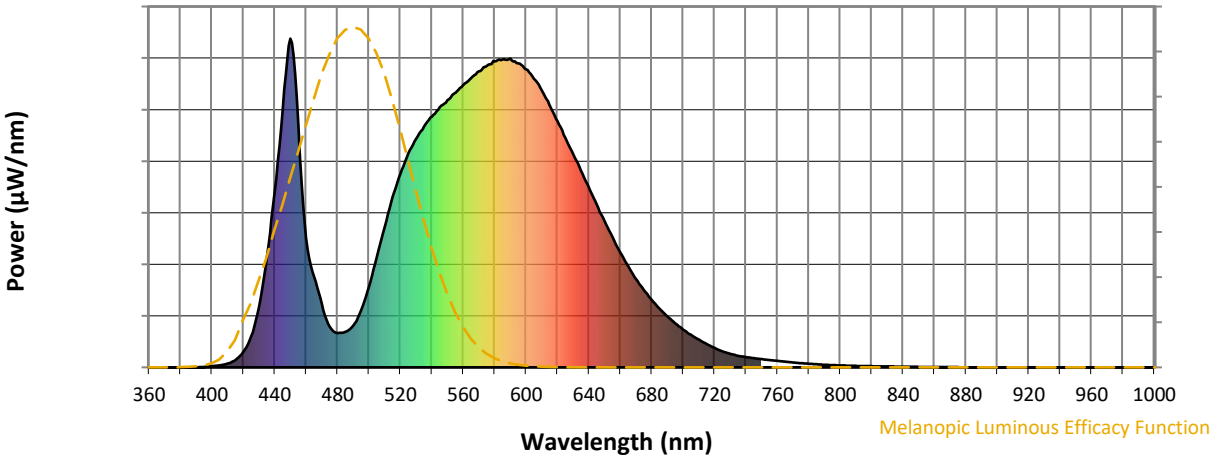


Scotopic Lumens: NR **S/P: 1.45**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2407-176-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.76**

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	127	NR	620	748	NR	750	25	NR	880	0	NR
365	0	NR	495	173	NR	625	699	NR	755	22	NR	885	0	NR
370	0	NR	500	246	NR	630	648	NR	760	20	NR	890	0	NR
375	0	NR	505	335	NR	635	599	NR	765	17	NR	895	0	NR
380	0	NR	510	427	NR	640	547	NR	770	15	NR	900	0	NR
385	0	NR	515	517	NR	645	495	NR	775	13	NR	905	0	NR
390	0	NR	520	589	NR	650	445	NR	780	11	NR	910	0	NR
395	1	NR	525	649	NR	655	396	NR	785	9	NR	915	0	NR
400	4	NR	530	695	NR	660	349	NR	790	8	NR	920	0	NR
405	6	NR	535	733	NR	665	308	NR	795	7	NR	925	0	NR
410	11	NR	540	763	NR	670	269	NR	800	6	NR	930	0	NR
415	23	NR	545	792	NR	675	235	NR	805	5	NR	935	0	NR
420	46	NR	550	813	NR	680	205	NR	810	5	NR	940	0	NR
425	95	NR	555	835	NR	685	178	NR	815	4	NR	945	0	NR
430	183	NR	560	859	NR	690	155	NR	820	3	NR	950	0	NR
435	338	NR	565	880	NR	695	134	NR	825	3	NR	955	0	NR
440	534	NR	570	900	NR	700	115	NR	830	3	NR	960	0	NR
445	782	NR	575	918	NR	705	99	NR	835	2	NR	965	0	NR
450	1000	NR	580	931	NR	710	84	NR	840	2	NR	970	0	NR
455	739	NR	585	937	NR	715	71	NR	845	2	NR	975	0	NR
460	393	NR	590	939	NR	720	59	NR	850	1	NR	980	0	NR
465	276	NR	595	925	NR	725	49	NR	855	1	NR	985	0	NR
470	190	NR	600	907	NR	730	41	NR	860	1	NR	990	0	NR
475	123	NR	605	878	NR	735	35	NR	865	1	NR	995	0	NR
480	105	NR	610	842	NR	740	31	NR	870	1	NR	1000	0	NR
485	108	NR	615	797	NR	745	28	NR	875	1	NR			

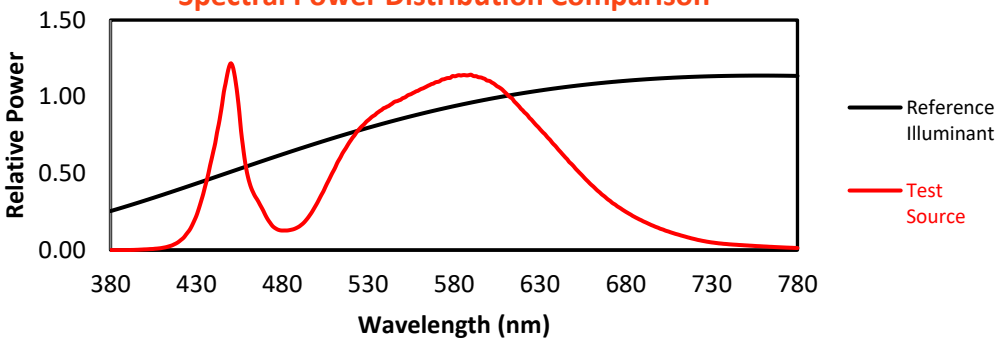
REPORT NUMBER: SP1-2407-176-5

TM-30-18

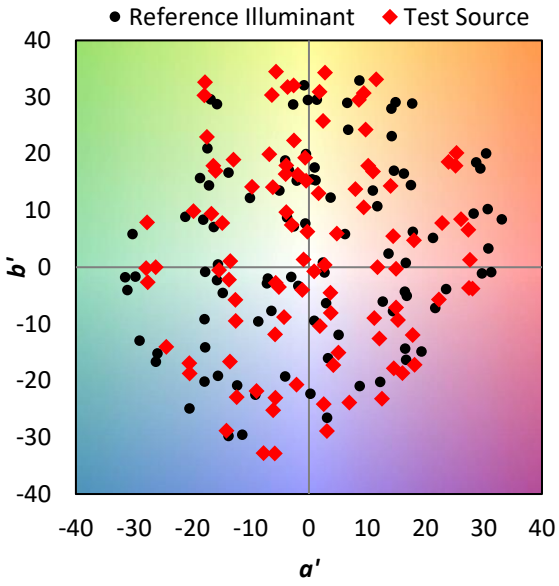
Summary

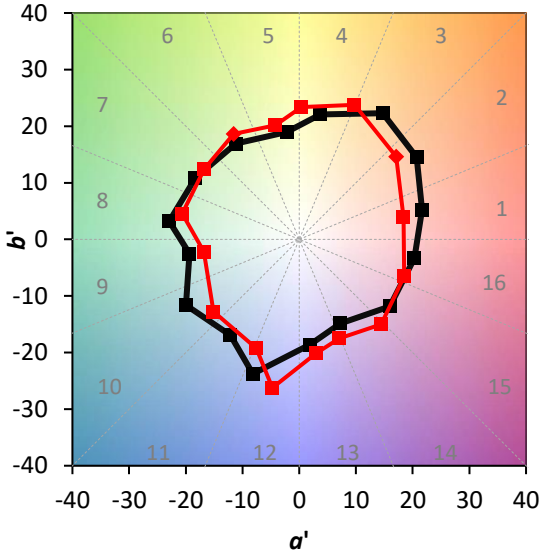
R_f = 75.6
R_g = 94.8
CIE R_a = 72.9
R_9 = -21.5

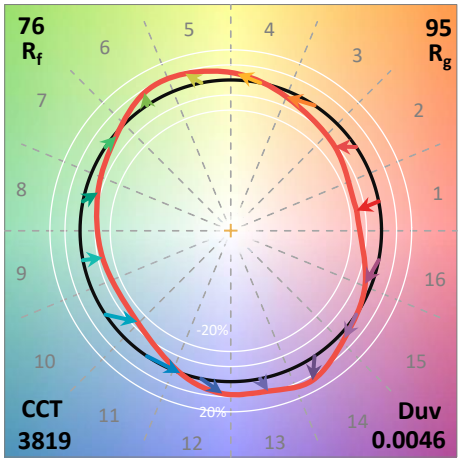
Spectral Power Distribution Comparison

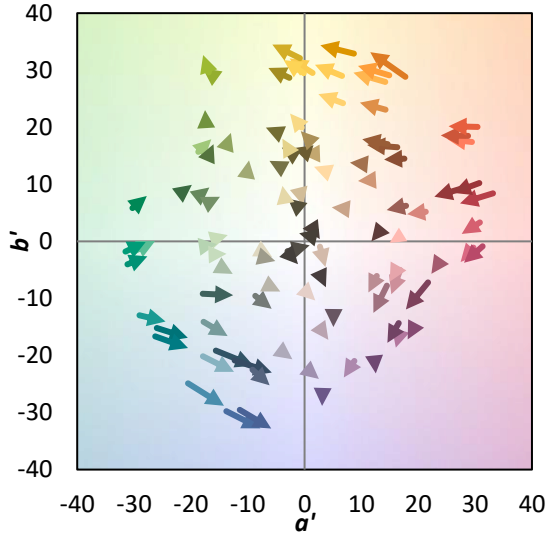


Color Vector Graphics







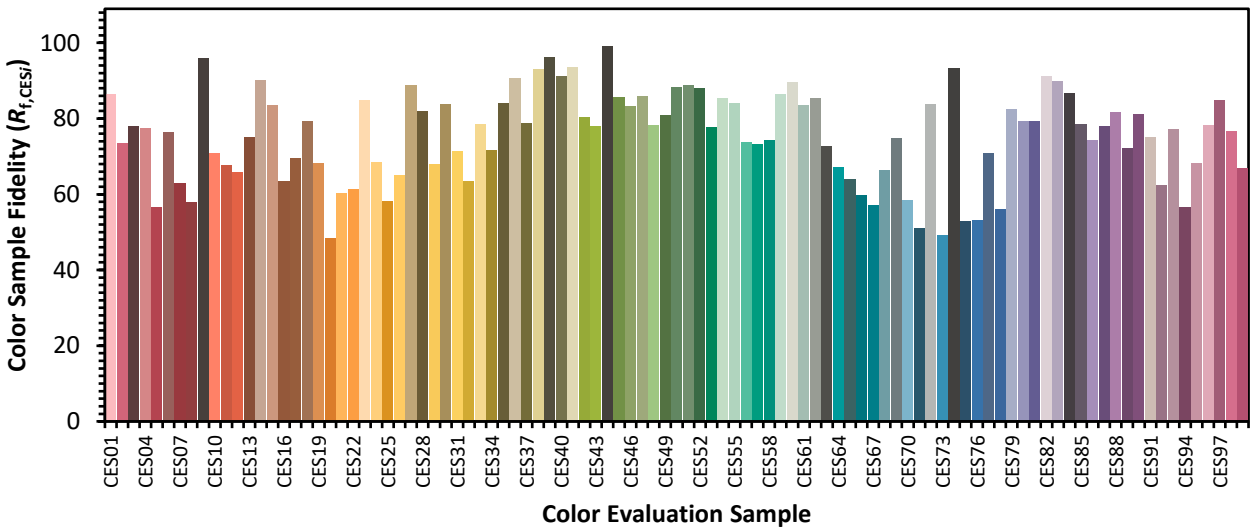


REPORT NUMBER: SP1-2407-176-5

TM-30-18

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

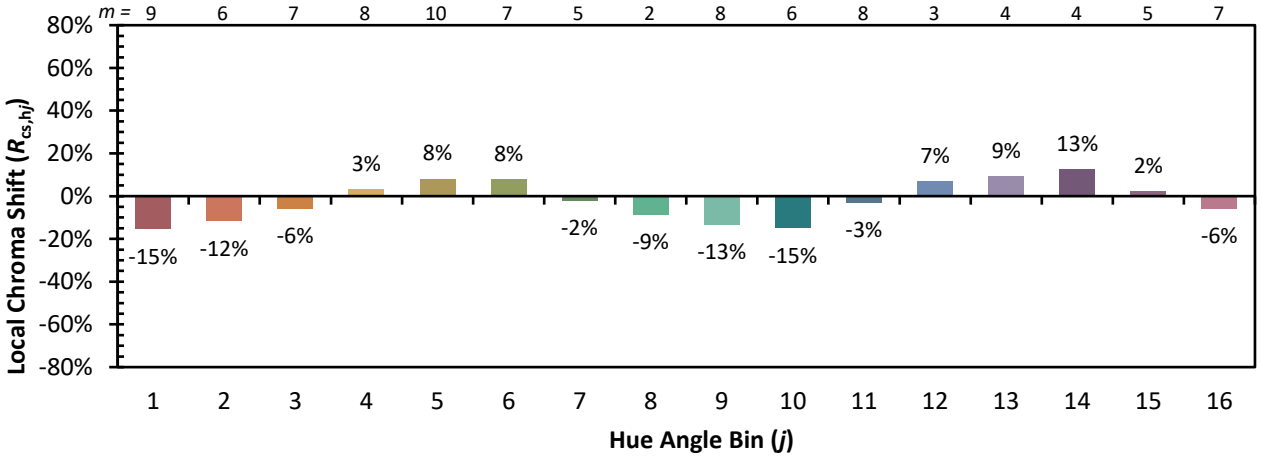
CES01 = 85	CES26 = 65	CES51 = 89	CES76 = 53
CES02 = 61	CES27 = 89	CES52 = 88	CES77 = 71
CES03 = 30	CES28 = 82	CES53 = 78	CES78 = 56
CES04 = 70	CES29 = 68	CES54 = 85	CES79 = 83
CES05 = 48	CES30 = 84	CES55 = 84	CES80 = 79
CES06 = 50	CES31 = 71	CES56 = 74	CES81 = 79
CES07 = 40	CES32 = 63	CES57 = 73	CES82 = 91
CES08 = 39	CES33 = 79	CES58 = 74	CES83 = 90
CES09 = 29	CES34 = 72	CES59 = 86	CES84 = 87
CES10 = 74	CES35 = 84	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 91	CES61 = 84	CES86 = 74
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 78
CES13 = 42	CES38 = 93	CES63 = 73	CES88 = 82
CES14 = 74	CES39 = 96	CES64 = 67	CES89 = 72
CES15 = 71	CES40 = 91	CES65 = 64	CES90 = 81
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 75
CES17 = 49	CES42 = 80	CES67 = 57	CES92 = 62
CES18 = 56	CES43 = 78	CES68 = 66	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 75	CES94 = 57
CES20 = 65	CES45 = 86	CES70 = 58	CES95 = 68
CES21 = 86	CES46 = 83	CES71 = 51	CES96 = 78
CES22 = 78	CES47 = 86	CES72 = 84	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 49	CES98 = 77
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 67
CES25 = 72	CES50 = 88	CES75 = 53	

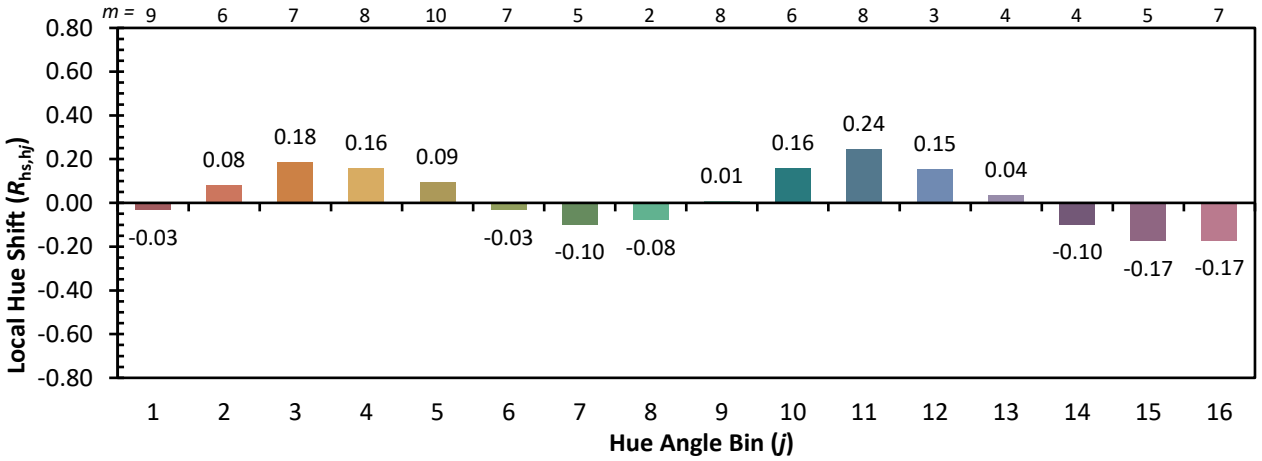


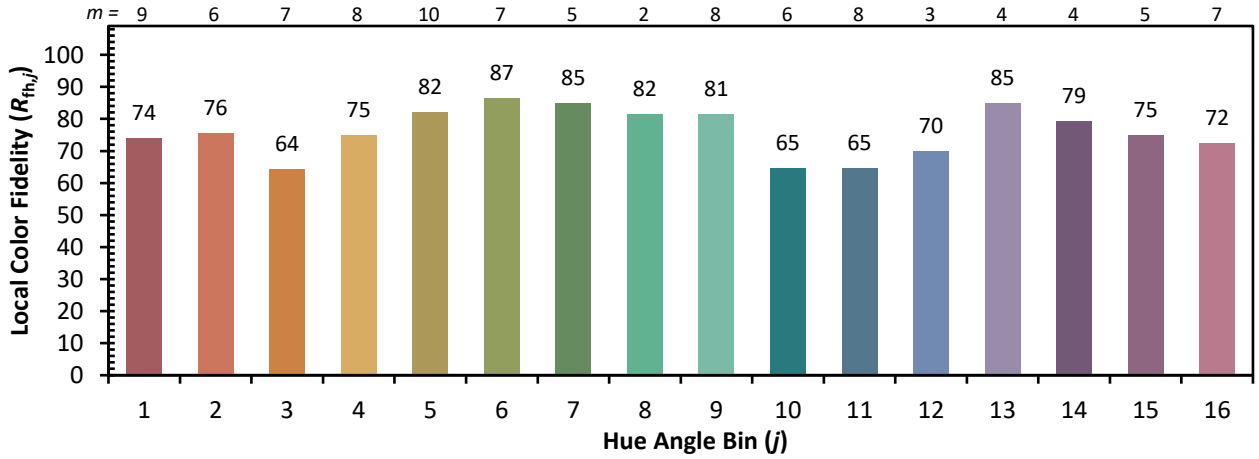
REPORT NUMBER: SP1-2407-176-5

TM-30-18

Color Rendition by Hue-Angle Bin



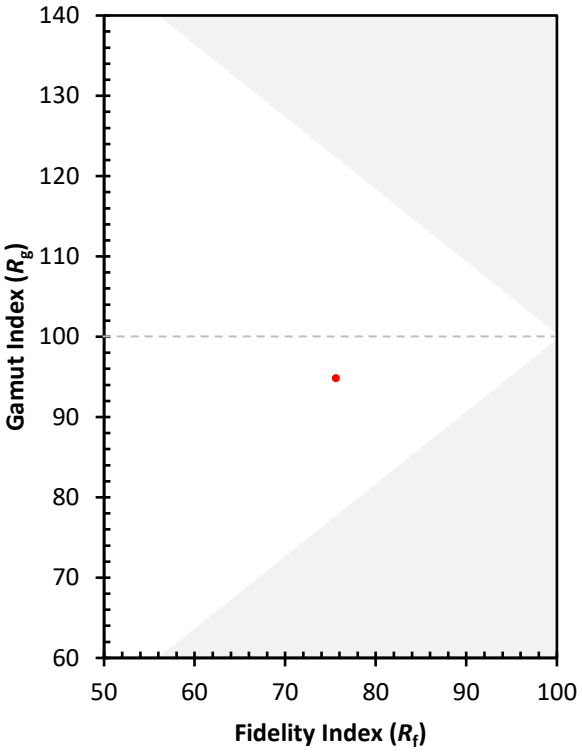


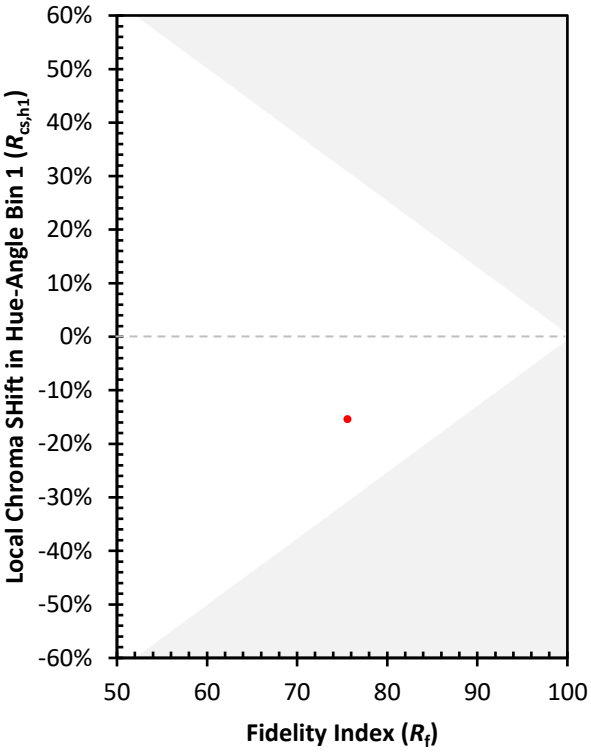


REPORT NUMBER: SP1-2407-176-5

TM-30-18

Measure Comparisons





(END OF REPORT)