

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: McGRAW-EDISON

Report Number: P438578

Luminaire Tested: **ISW-SA1D-760-U-SL2-HSS**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-15)
Test Lab: INNOVATION CENTER
Issue Date: 12/10/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: ISW-SA1D-760-U-SL2-HSS
Description: IMPACT ELITE LED WEDGE LUMINAIRE
(1) 70 CRI, 5700K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

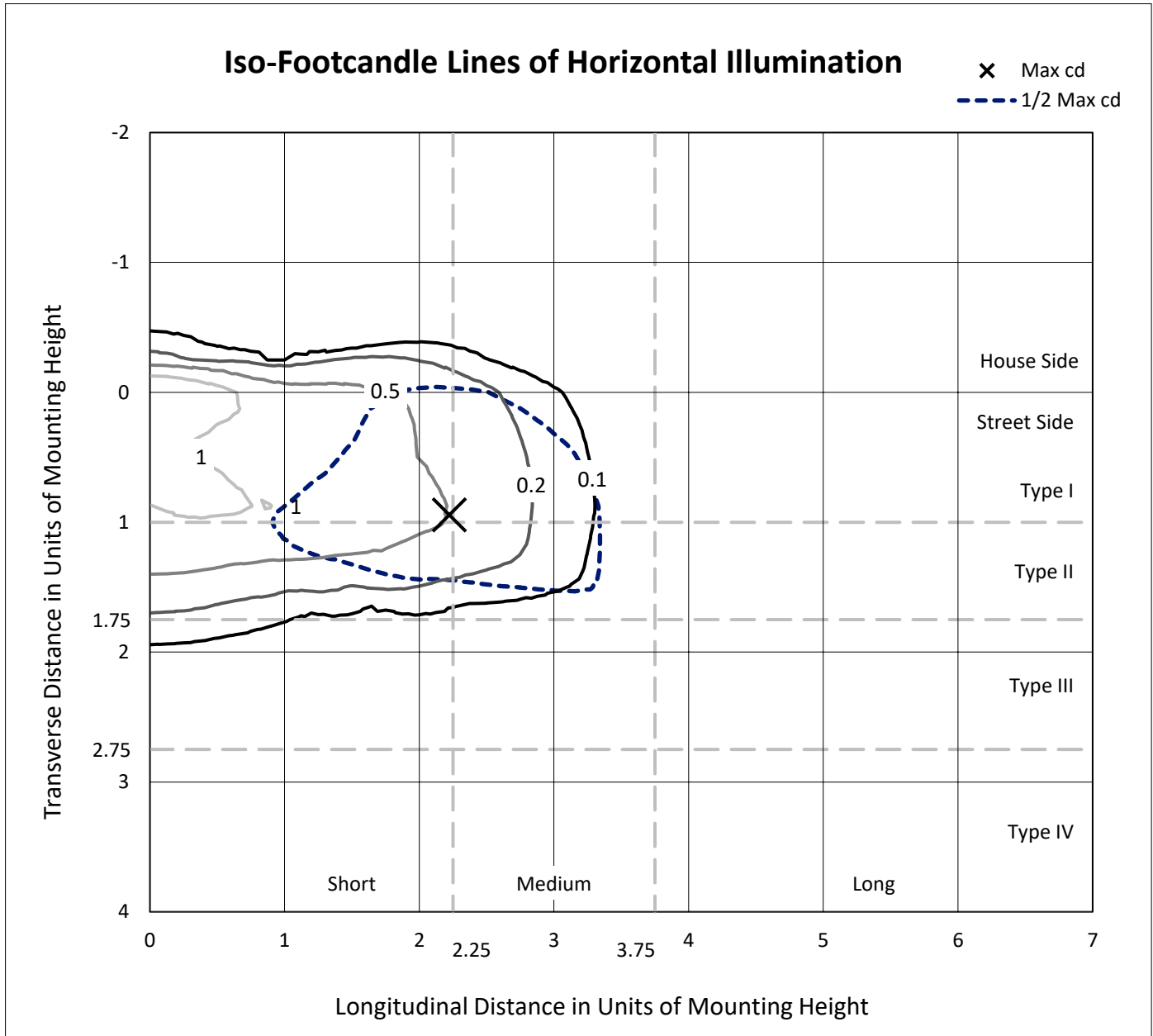
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4573 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 45.2
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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 CATALOG NUMBER: ISW-SA1D-760-U-SL2-HSS



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type II - Short - N/A



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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°)	400.9	8.8			
FM (30°-60°)	2007.8	43.9			
FH (60°-80°)	1600.6	35.0			G1/1800
FVH (80°-90°)	41.9	0.9			G1/100
BL (0°-30°)	169.5	3.7	B1/500		
BM (30°-60°)	198.7	4.3	B0/220		
BH (60°-80°)	151.4	3.3	B1/500		G1/500
BVH (80°-90°)	2.2	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

/ | / / / / / /



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8
2.5°	1101.8	1111.8	1113.8	1117.9	1117.9	1123.9	1125.9	1129.9	1127.9	1129.9	1125.9
5°	1025.5	1033.6	1029.5	1049.6	1061.7	1083.7	1105.8	1123.9	1123.9	1129.9	1127.9
7.5°	949.3	957.3	957.3	973.4	993.4	1025.5	1061.7	1103.8	1107.8	1127.9	1121.9
10°	889.1	893.1	897.1	915.2	939.2	971.3	1019.5	1073.7	1081.7	1115.8	1117.9
12.5°	840.9	846.9	852.9	871.0	893.1	925.2	971.3	1033.6	1047.6	1095.8	1113.8
15°	816.8	816.8	822.8	838.9	859.0	893.1	935.2	1007.5	1019.5	1083.7	1111.8
17.5°	804.8	806.8	810.8	818.8	834.9	863.0	909.1	979.4	995.4	1073.7	1111.8
20°	820.8	820.8	814.8	818.8	826.9	848.9	891.1	959.3	979.4	1067.7	1121.9
22.5°	854.9	854.9	844.9	838.9	832.9	840.9	879.0	951.3	969.3	1067.7	1127.9
25°	907.1	907.1	901.1	883.0	857.0	850.9	881.0	949.3	963.3	1069.7	1135.9
27.5°	969.3	971.3	965.3	945.3	905.1	871.0	887.1	945.3	961.3	1067.7	1139.9
30°	1051.6	1059.7	1051.6	1023.5	975.4	911.1	901.1	943.3	959.3	1063.7	1141.9
32.5°	1133.9	1139.9	1148.0	1129.9	1061.7	973.4	931.2	951.3	965.3	1065.7	1137.9
35°	1214.2	1230.2	1244.3	1250.3	1180.1	1061.7	981.4	969.3	975.4	1071.7	1137.9
37.5°	1300.5	1316.5	1346.6	1376.7	1318.5	1160.0	1055.6	1009.5	1009.5	1091.8	1150.0
40°	1410.9	1418.9	1477.1	1513.2	1485.1	1318.5	1162.0	1077.7	1075.7	1148.0	1184.1
42.5°	1517.2	1539.3	1615.6	1669.8	1651.7	1505.2	1290.4	1198.1	1178.1	1238.3	1246.3
45°	1671.8	1705.9	1766.1	1846.4	1864.4	1713.9	1489.1	1352.7	1332.6	1372.7	1350.7
47.5°	1816.3	1840.3	1898.5	2000.9	2105.3	1982.8	1713.9	1569.4	1551.3	1567.4	1531.3
50°	1862.4	1874.5	1940.7	2067.1	2314.0	2368.2	2023.0	1850.4	1848.4	1836.3	1776.1
52.5°	1782.1	1784.2	1860.4	2014.9	2400.3	2789.6	2460.5	2213.6	2179.5	2153.4	2073.1
55°	1537.3	1555.4	1619.6	1812.2	2316.0	3032.5	3160.9	2653.1	2597.0	2502.6	2402.3
57.5°	1202.1	1194.1	1246.3	1422.9	2057.1	3128.8	3851.3	3211.1	3070.6	2787.6	2653.1
60°	875.0	854.9	889.1	989.4	1495.2	2940.1	4250.7	3997.8	3757.0	3094.7	2962.2
62.5°	650.2	650.2	686.4	732.5	917.2	2293.9	4312.9	4898.9	4628.0	3484.0	3289.3
65°	519.8	517.8	547.9	618.1	654.3	1422.9	3999.8	5541.1	5438.8	3889.4	3504.1
67.5°	415.4	415.4	441.5	537.9	588.0	808.8	3094.7	5561.2	5591.3	4122.2	3373.6
70°	293.0	303.0	335.2	449.5	568.0	618.1	1876.5	4776.5	4854.7	4052.0	3026.4
72.5°	164.6	172.6	230.8	333.1	545.9	594.0	1049.6	3608.4	3740.9	3395.7	2468.5
75°	78.3	86.3	134.5	228.8	455.6	566.0	638.2	2558.8	2540.8	2205.6	1533.3
77.5°	34.1	38.1	60.2	132.5	323.1	527.8	467.6	1599.5	1527.3	1035.6	644.2
80°	12.0	14.0	26.1	76.3	182.6	431.5	389.3	738.5	668.3	287.0	168.6
82.5°	2.0	2.0	10.0	36.1	82.3	240.8	321.1	353.2	305.1	72.2	72.2
85°	0.0	0.0	2.0	12.0	20.1	22.1	144.5	142.5	118.4	24.1	36.1
87.5°	0.0	0.0	0.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	6.0
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°	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8	1115.8
2.5°	1115.8	1113.8	1093.8	1075.7	1051.6	1031.6	1013.5	995.4	987.4	989.4	993.4
5°	1117.9	1105.8	1063.7	1017.5	969.3	921.2	875.0	846.9	824.8	816.8	824.8
7.5°	1107.8	1087.8	1023.5	949.3	873.0	788.7	718.5	666.3	628.2	604.1	614.1
10°	1099.8	1069.7	975.4	863.0	754.6	644.2	543.9	469.6	417.4	387.3	381.3
12.5°	1085.7	1049.6	919.2	776.7	626.2	475.6	355.2	277.0	234.8	212.7	218.8
15°	1081.7	1025.5	863.0	676.3	489.7	321.1	214.7	170.6	152.5	148.5	148.5
17.5°	1077.7	1009.5	802.8	578.0	351.2	200.7	148.5	136.5	132.5	130.4	132.5
20°	1073.7	987.4	742.6	471.6	236.8	144.5	128.4	122.4	118.4	118.4	116.4
22.5°	1077.7	973.4	686.4	371.3	162.6	122.4	112.4	108.4	104.4	102.4	102.4
25°	1073.7	955.3	618.1	272.9	126.4	108.4	100.3	92.3	88.3	86.3	84.3
27.5°	1067.7	933.2	553.9	196.7	110.4	96.3	86.3	78.3	72.2	70.2	70.2
30°	1061.7	905.1	479.7	144.5	100.3	86.3	74.3	66.2	60.2	56.2	56.2
32.5°	1045.6	879.0	407.4	116.4	90.3	76.3	64.2	54.2	50.2	48.2	48.2
35°	1035.6	848.9	331.1	100.3	82.3	66.2	54.2	46.2	42.1	40.1	40.1
37.5°	1033.6	816.8	262.9	90.3	74.3	58.2	46.2	40.1	36.1	34.1	34.1
40°	1041.6	800.8	202.7	82.3	64.2	50.2	40.1	34.1	30.1	28.1	28.1
42.5°	1073.7	798.8	154.5	74.3	58.2	44.2	36.1	28.1	24.1	22.1	22.1
45°	1146.0	810.8	122.4	68.2	50.2	38.1	30.1	24.1	20.1	18.1	18.1
47.5°	1264.4	861.0	102.4	62.2	42.1	32.1	24.1	20.1	14.0	14.0	14.0
50°	1457.0	967.3	90.3	54.2	36.1	26.1	20.1	14.0	10.0	10.0	10.0
52.5°	1742.0	1129.9	82.3	48.2	30.1	22.1	16.1	10.0	8.0	8.0	8.0
55°	2037.0	1332.6	76.3	40.1	26.1	18.1	12.0	8.0	6.0	6.0	4.0
57.5°	2306.0	1499.2	68.2	34.1	20.1	14.0	8.0	6.0	4.0	4.0	4.0
60°	2625.1	1665.7	58.2	26.1	16.1	10.0	6.0	4.0	2.0	2.0	2.0
62.5°	2934.1	1760.1	48.2	20.1	12.0	8.0	4.0	2.0	2.0	2.0	2.0
65°	3068.6	1715.9	38.1	16.1	10.0	6.0	2.0	2.0	2.0	0.0	0.0
67.5°	2888.0	1451.0	30.1	12.0	8.0	4.0	2.0	2.0	0.0	0.0	0.0
70°	2486.6	1174.0	24.1	10.0	6.0	2.0	2.0	2.0	0.0	0.0	0.0
72.5°	1952.7	865.0	20.1	8.0	4.0	2.0	2.0	2.0	0.0	0.0	0.0
75°	1188.1	435.5	18.1	6.0	4.0	4.0	2.0	2.0	2.0	0.0	0.0
77.5°	403.4	136.5	12.0	6.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
80°	118.4	44.2	10.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	62.2	20.1	6.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	34.1	10.0	4.0	2.0	2.0	2.0	0.0	0.0	2.0	2.0	2.0
87.5°	6.0	4.0	4.0	2.0	2.0	2.0	0.0	0.0	0.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



Test Information

Test Method: LM-79-20
 Report Number: SP1-1908-441-9-R4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: $\theta = 0^\circ$
 Issue Date: 10/28/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW-EDISON
 Catalog Number: **SA1C-760-U-5WQ**
 Description: MCGRAW EDISON ROADWAY AND AREA LUMINAIRE

THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

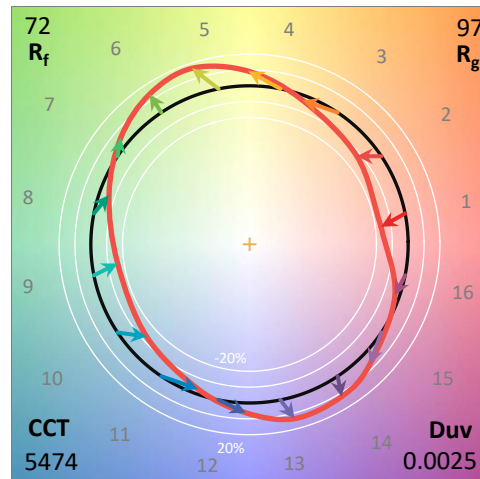
Spectral Parameters

CCT (K): 5474
 CIE u': 0.2052
 CIE v': 0.4804
 Duv: 0.0025
 CIE x: 0.3330
 CIE y: 0.3466
 CIE z: 0.3204
 Peak Wavelength (nm): 442
 Dominant Wavelength (nm): 554
 Purity: 4.1

CRI (Ra): 71.7
 R1: 70.6
 R2: 74.6
 R3: 78.3
 R4: 73.8
 R5: 72.4
 R6: 67.5
 R7: 77.5
 R8: 58.9

R9: -27.1
 R10: 40.8
 R11: 74.6
 R12: 50.4
 R13: 70.0
 R14: 87.8

Rf: 72.1
 Rg: 97.2



Test Conditions

Stabilization Time: 240M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.6/31%
 Sphere Temperature (°C): 25.9

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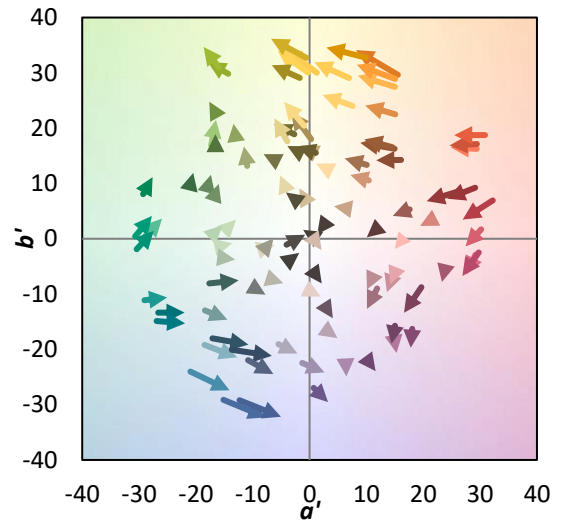
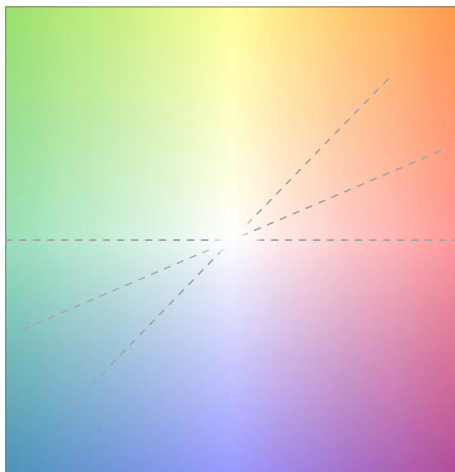
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Summary

$R_f = 72.1$
 $R_g = 97.2$
 CIE $R_a = 71.7$
 $R_g = -27.1$



Color Vector Graphics



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

CES01 = 85	CES26 = 54	CES51 = 88	CES76 = 43
CES02 = 59	CES27 = 79	CES52 = 90	CES77 = 64
CES03 = 30	CES28 = 77	CES53 = 77	CES78 = 46
CES04 = 69	CES29 = 50	CES54 = 81	CES79 = 74
CES05 = 46	CES30 = 59	CES55 = 80	CES80 = 70
CES06 = 50	CES31 = 55	CES56 = 70	CES81 = 71
CES07 = 38	CES32 = 52	CES57 = 68	CES82 = 88
CES08 = 38	CES33 = 63	CES58 = 70	CES83 = 82
CES09 = 29	CES34 = 63	CES59 = 88	CES84 = 87
CES10 = 72	CES35 = 79	CES60 = 92	CES85 = 84
CES11 = 55	CES36 = 90	CES61 = 88	CES86 = 76
CES12 = 61	CES37 = 72	CES62 = 81	CES87 = 75
CES13 = 41	CES38 = 68	CES63 = 75	CES88 = 77
CES14 = 74	CES39 = 91	CES64 = 72	CES89 = 76
CES15 = 70	CES40 = 83	CES65 = 65	CES90 = 76
CES16 = 46	CES41 = 84	CES66 = 66	CES91 = 92
CES17 = 48	CES42 = 70	CES67 = 64	CES92 = 70
CES18 = 55	CES43 = 69	CES68 = 71	CES93 = 83
CES19 = 70	CES44 = 98	CES69 = 80	CES94 = 60
CES20 = 64	CES45 = 79	CES70 = 58	CES95 = 73
CES21 = 85	CES46 = 78	CES71 = 55	CES96 = 79
CES22 = 77	CES47 = 76	CES72 = 84	CES97 = 84
CES23 = 91	CES48 = 68	CES73 = 47	CES98 = 73
CES24 = 90	CES49 = 78	CES74 = 94	CES99 = 62
CES25 = 71	CES50 = 87	CES75 = 51	



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Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)