



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Rosco Laboratories Inc
52 Harbor View Ave
Stamford, CT 06902-5914
United States

Catalog Number
MINI MIX with flat diffuser: LEDs tuned to 3200K
Order Number
12451557
Test Number
12451557.11

Test Date

2018-08-10

Prepared By

Cordaryl Cousar, Technician

Approved By

Kevin Rodriguez, Project Handler

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Black formed aluminum housing, frosted plastic lens enclosure
Lamp: 288 white/colored LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One Mean Well GS120A24-P1M

Luminaire



Luminaire Characteristics

Luminous Length: 23.00 in.
Luminous Width: 8.000 in.
Luminous Height: 0.25 in.

Summary of Results

Total Luminaire Output: 6240 Lumens
Luminaire Efficacy: 62 lm/w
Maximum Candela: 2179 Candela

Test Conditions

Test Temperature: 24.5 °C
Voltage: 120.0 VAC
Current: 0.8415 A
Power: 100.7 W
Power Factor: 0.997
Frequency: 60 Hz
Current THD: 4.42 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

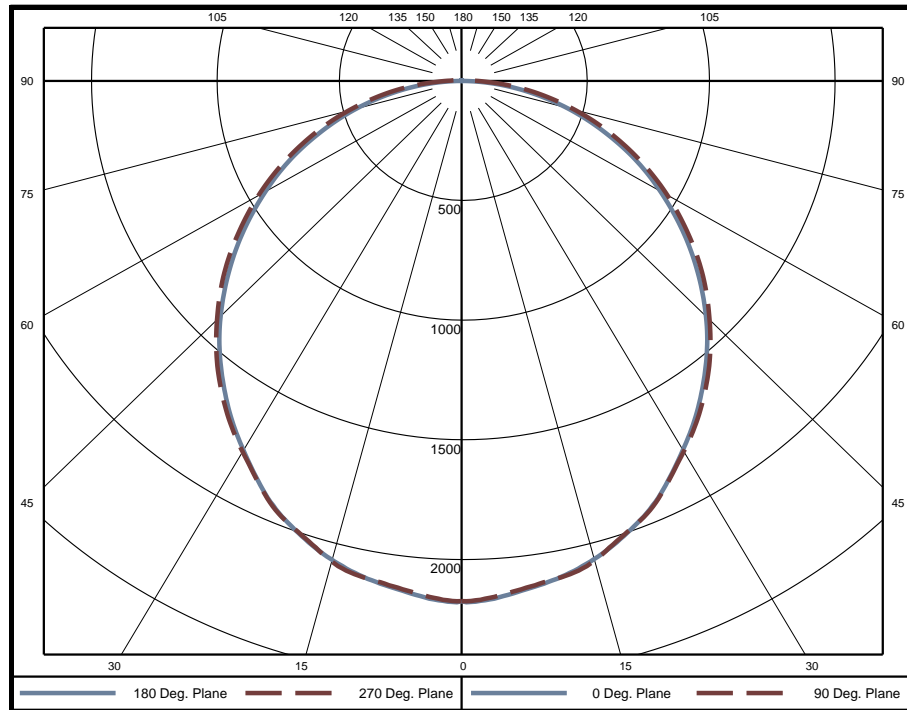
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.8415 A	100.7 W	0.997	60 Hz	4.42 %

Summary of Results

Spacing Criteria
 0-180: 1.22
 90-270: 1.23

Total Lumen Output: 6240 Lumens
Luminaire Efficacy: 62.0 lm/w
Maximum Candela: 2179 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	51.7	0.8%	60-65	420.0	6.7%	120-125	0	0.0%
5-10	152.4	2.4%	65-70	355.7	5.7%	125-130	0	0.0%
10-15	248.5	4.0%	70-75	283.0	4.5%	130-135	0	0.0%
15-20	334.4	5.4%	75-80	204.9	3.3%	135-140	0	0.0%
20-25	408.8	6.6%	80-85	125.9	2.0%	140-145	0	0.0%
25-30	466.0	7.5%	85-90	51.2	0.8%	145-150	0	0.0%
30-35	508.7	8.2%	90-95	14.2	0.2%	150-155	0	0.0%
35-40	535.8	8.6%	95-100	7.0	0.1%	155-160	0	0.0%
40-45	545.6	8.7%	100-105	2.8	0.0%	160-165	0	0.0%
45-50	537.4	8.6%	105-110	0.5	0.0%	165-170	0	0.0%
50-55	512.8	8.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	472.3	7.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	2706	43.4%
0-60	4774	76.5%
0-90	6215	99.6%
90-180	25	0.4%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174	2174
	5	2156	2150	2147	2147	2149	2147	2147	2150	2156	2150	2147	2147	2149	2147	2150
	10	2119	2115	2114	2116	2117	2116	2114	2115	2119	2115	2114	2116	2117	2116	2115
	15	2068	2065	2067	2071	2075	2071	2067	2065	2068	2065	2067	2071	2075	2071	2067
	20	1996	1991	1991	1991	1994	1991	1991	1991	1996	1991	1991	1991	1994	1991	1991
	25	1903	1898	1900	1902	1905	1902	1900	1898	1903	1898	1900	1902	1905	1902	1900
	30	1784	1782	1784	1787	1791	1787	1784	1782	1784	1782	1784	1787	1791	1787	1784
	35	1665	1664	1668	1675	1679	1675	1668	1664	1665	1664	1668	1675	1679	1675	1668
	40	1536	1536	1541	1549	1555	1549	1541	1536	1536	1536	1541	1549	1555	1549	1541
	45	1396	1397	1403	1411	1415	1411	1403	1397	1396	1397	1403	1411	1415	1411	1403
	50	1244	1246	1255	1266	1272	1266	1255	1246	1244	1246	1255	1266	1272	1266	1255
	55	1088	1091	1101	1113	1117	1113	1101	1091	1088	1091	1101	1113	1117	1113	1101
	60	929	931	943	954	961	954	943	931	929	931	943	954	961	954	943
	65	771	773	784	796	800	796	784	773	771	773	784	796	800	796	784
	70	605	608	622	634	639	634	622	608	605	608	622	634	639	634	622
	75	444	449	463	475	479	475	463	449	444	449	463	475	479	475	463
	80	285	292	308	320	324	320	308	292	285	292	308	320	324	320	308
	85	135	145	161	174	176	174	161	145	135	145	161	174	176	174	161
	90	7	30	48	61	65	61	48	30	7	30	48	61	65	61	48
	95	4	7	18	28	32	28	18	7	4	7	18	28	32	28	18
	100	5	2	6	15	19	15	6	2	5	2	6	15	19	15	6
	105	1	0	0	5	8	5	0	0	1	0	0	5	8	5	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

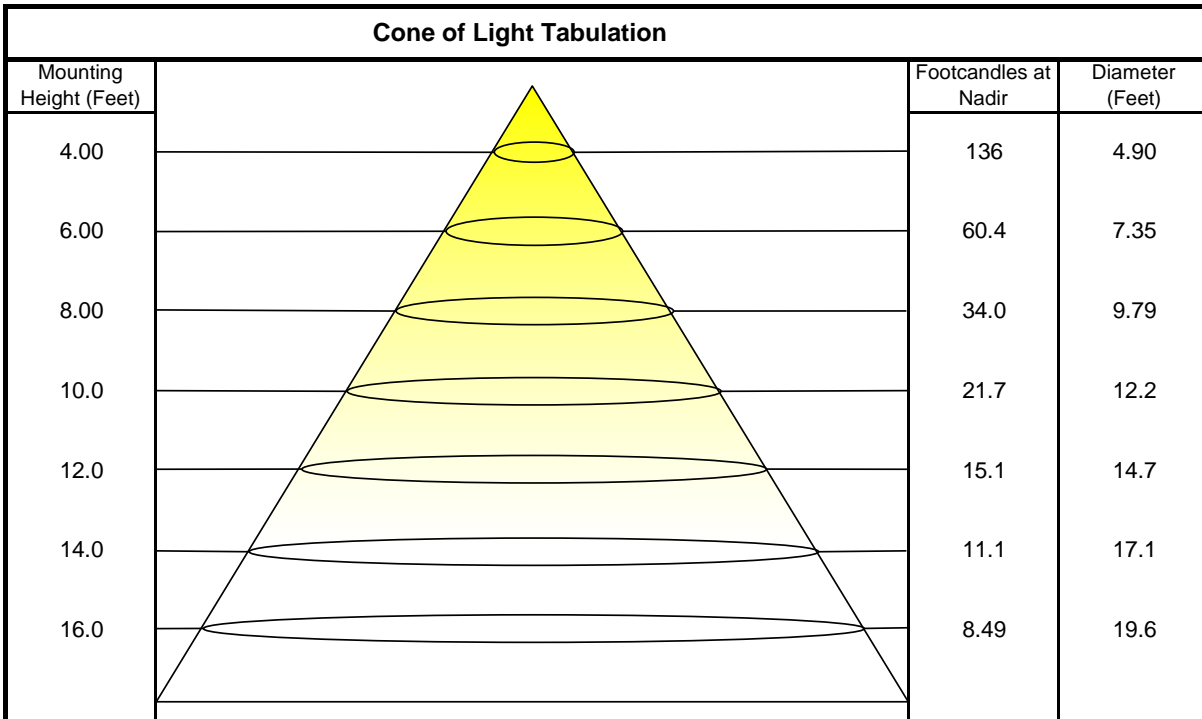
Vertical Angle (Degrees)	0	45	90
	0	18320	18320
	45	16450	16230
	55	15740	15510
	65	15020	14700
	75	13890	13560
	85	11560	11590



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	94	105	101	97	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	88	81	76	84	78	74	81	76	72	77	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	63	59	57
4	82	69	60	54	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	43	39	37
7	64	51	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	36	30	25	23

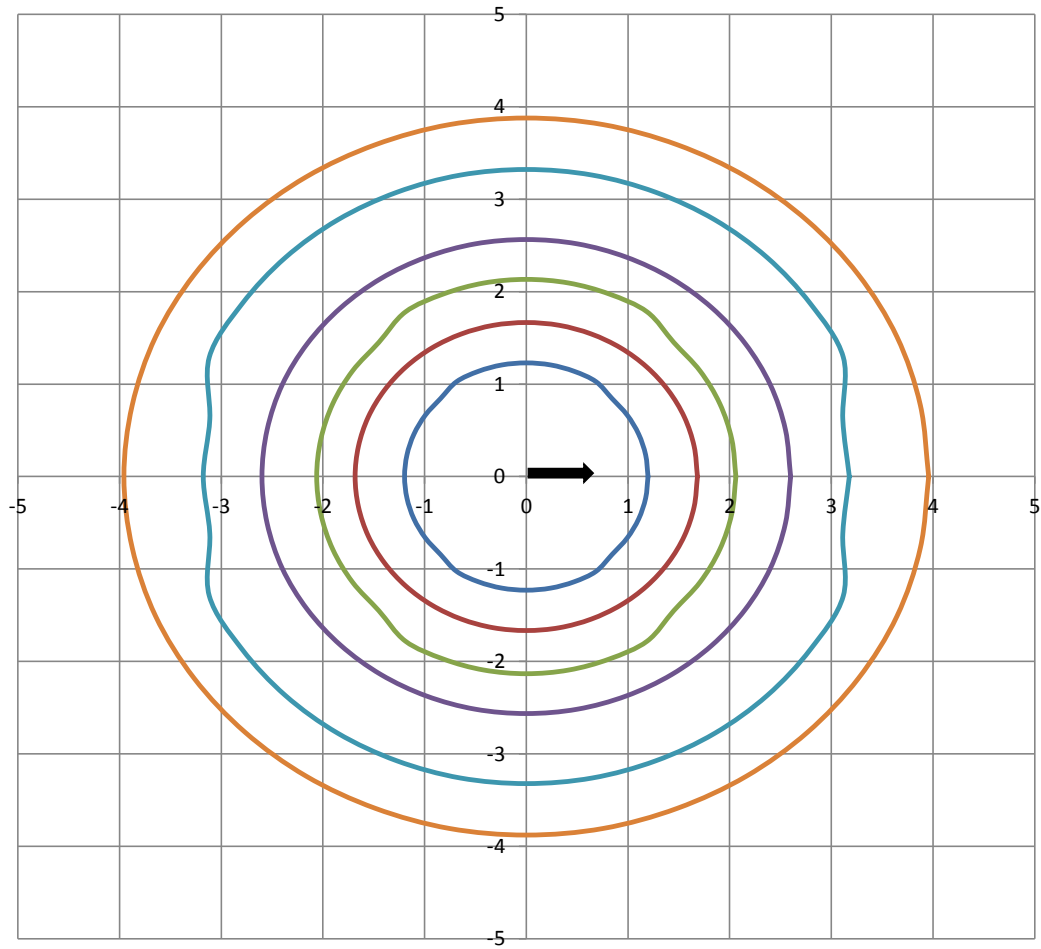
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2174 Candela
Central Cone Intensity:	2165 Candela
Beam Flux:	4350.1 Lumens
Beam Angle (0-180):	110.1 Degrees
Beam Angle (90-270):	111.9 Degrees
Field Angle (0-180):	164.5 Degrees
Field Angle (90-270):	167.2 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc 2 fc 1 fc 0.5 fc 0.2 fc 0.1 fc