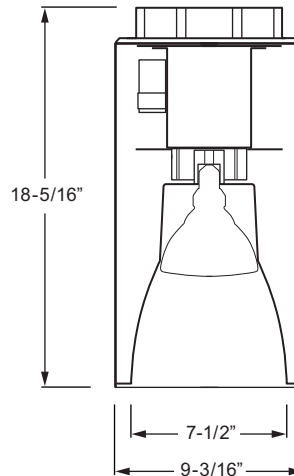
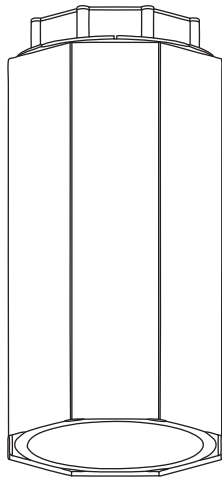


## 9" PAR LAMP OCTAGONAL SURFACE MOUNT CYLINDER



### CATALOG NUMBER

SERIES	WATTAGE	LAMP BASE	VOLTAGE
MHROC90	70	PAR38-MED	
MHROC90	100	PAR38-MED	

- Standard self-flanged aluminum reflector with semi-specular low-iridescent (CS) finish.
- Standard cylinder colors are bronze, black, or white (must specify when ordering).
- Heavy-gauge die-formed and welded aluminum housing.
- Porcelain socket.
- Pendant mount (indoor applications only) and wall mount available as options.
- Encapsulated core and coil ballast: dual tap (120/277).
- Prewired at factory for easy field installation.
- Lamp by others.
- Custom colors available.
- UL/CUL listed for dry or damp locations.
- This fixture is proudly made in the USA.

### OPTIONS & ADDERS

### SUFFIX

White housing	WHT
Black housing	BLK
Bronze housing	BRZ
Clear semi-specular reflector	CS
Clear specular reflector	SPC
Straw reflector	STR
Champagne gold reflector	CG
Gold reflector	GD
Wheat reflector	WT
Pewter reflector	PW
Satin-glow reflector	SG
Micro-baffle	MB
Fuse	F
208, 240, 347, 480 volt	(#) VOLT
Wall mount	WM
Pendant mount (Swivel canopy w/24" stem, indoor applications only)	PM
Electronic ballast (Consult factory)	EB

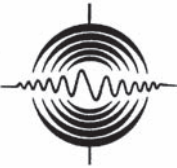
**FIXTURE SUBMITTED/APPROVED**



DOWNLIGHTING

**BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.**

1618 HEADLAND DR.  
FENTON, MO 63026  
(314) 343-6006  
(314) 343-6051 FAX



Report No: **8727.0**

Date: **3/12/96**

Description: **100W Metal Halide Par 38 Lamp 7.375" dia Recessed Luminaire  
Low Iridescent Specular Reflector w/Open Bottom**

**2 Motorola Ballast #M1-CF-32-B-S-120**

Catalog No: **MHROC90-100-PAR38**

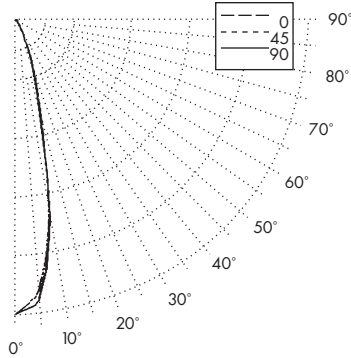
Lamp Type: **M90 (MP100PAR38/U/SP20)**

Rated Lumens: **5200.**

No. Lamps: **1**

**CANDLEPOWER DISTRIBUTION**

VERT ANG	HORIZONTAL ANGLE					ZONAL LUMENS
	0	22.5	45	67.5	90	
0	22827.	22827.	22827.	22827.	22827.	2061.3
5	21816.	21707.	21188.	21652.	21846.	
10	15309.	15195.	15110.	15200.	15609.	2087.3
15	7739.	7310.	7485.	7255.	7066.	
20	4182.	4032.	4032.	4137.	3743.	811.9
25	1761.	1761.	1826.	1722.	1652.	
30	818.	778.	739.	714.	744.	185.3
35	309.	304.	299.	289.	264.	
40	100.	95.	95.	95.	90.	43.5
45	65.	55.	60.	50.	55.	
50	30.	25.	30.	35.	25.	.0
55	0.	0.	0.	0.	0.	
60	0.	0.	0.	0.	0.	.0
65	0.	0.	0.	0.	0.	
70	0.	0.	0.	0.	0.	.0
75	0.	0.	0.	0.	0.	
80	0.	0.	0.	0.	0.	.0
85	0.	0.	0.	0.	0.	
90	0.	0.	0.	0.	0.	



**ZONAL CAVITY COEFFICIENTS OF UTILIZATION**

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CEILING	.80				.70				.50			.30			
	WALL	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	106	102
0													106	.99	.94.
1	115	113	112	110	113	111	110	109	107	106	105	104	96.9	91.8	
2	111	108	105	103	109	106	104	102	103	101	99	101	3.90	8.86	
3	108	104	101	98	107	103	100	97	100	98	96	98	.88	83.	
4	105	100	96	93	104	99	95	93	97	94	92	95	.85	81.7	
5	102	96	92	90	101	96	92	89	94	91	88	92.9	.83.	8.76	
6	100	94	90	87	98	93	89	87	92	89	86	0.88	80.		
7	97	91	87	84	96	90	87	84	89	86	84	86	.78		
8	94	88	84	82	93	88	84	81	87	83	81	83.8	.10		
9	92	85	82	79	91	85	81	79	84	81	79	1			
10	89	83	79	76	88	82	78	76	81	78	76	.30	106		

**FIXTURE QUANTITY QUICK ESTIMATOR TABLES**

REFLECTANCE: Ceiling = 80%  
Walls = 50%  
Floor = 20%

LIGHT LOSS FACTOR: 1.0

Room Size - 10' Ceiling	±. 50 ftc	±. 75 ftc	±. 100 ftc
Small - 400 Sq Ft	4	6	9
Medium - 900 Sq Ft	9	12	16
Large - 1600 Sq Ft	16	25	30

**LUMEN SUMMARY**

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0-30	4960.	95.4	95.6	90-120	0.	.0	.0
0-40	5146.	99.0	99.2	90-130	0.	.0	.0
0-60	5189.	99.8	100.0	90-150	0.	.0	.0
0-90	5189.	99.8	100.0	90-180	0.	.0	.0
TOTAL LUMINAIRE =				0-180	5189.	99.8	100.0

IES SPACING CRITERIA: END = .4    DIAGONAL = .4    CROSS = .4

**LUMINANCES FOOT LAMBERTS**

VERT ANG	HORIZONTAL ANGLE		
	0	45	90
45	972.	897.	822.
55	0.	0.	0.
65	0.	0.	0.
75	0.	0.	0.
85	0.	0.	0.

MAXIMUM BRIGHTNESS NOT MEASURED

**LIGHT CONE QUICK CALCULATOR TABLES**

MNT HGT-FT	FC at		End	Cone Dia.	
	Edge of Cone	FC at Nadir		Diagonal	Cross
8	178.3	356.7	3.2	3.2	3.2
10	114.1	228.3	4.0	4.0	4.0
12	79.3	158.5	4.8	4.8	4.8
14	58.2	116.5	5.6	5.6	5.6
16	44.6	89.2	6.4	6.4	6.4
18	35.2	70.5	7.2	7.2	7.2
20	28.5	57.1	8.0	8.0	8.0

**COLOR CONVERSION FACTORS**

Straw = x .97	Wheat = x .88
Champagne = x .96	Pewter = x .86
Micro-baffle = x .60	Gold = x .93