

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: P821151

Luminaire Tested: **TT-D3-830-24VDC-MQ-UPL**

Issue Date: 7/23/2020



Test Information

Test Method: LM-79-08
Report Number: P821151
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G2-2002-677-2) AND
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-D3-830-24VDC-MQ-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

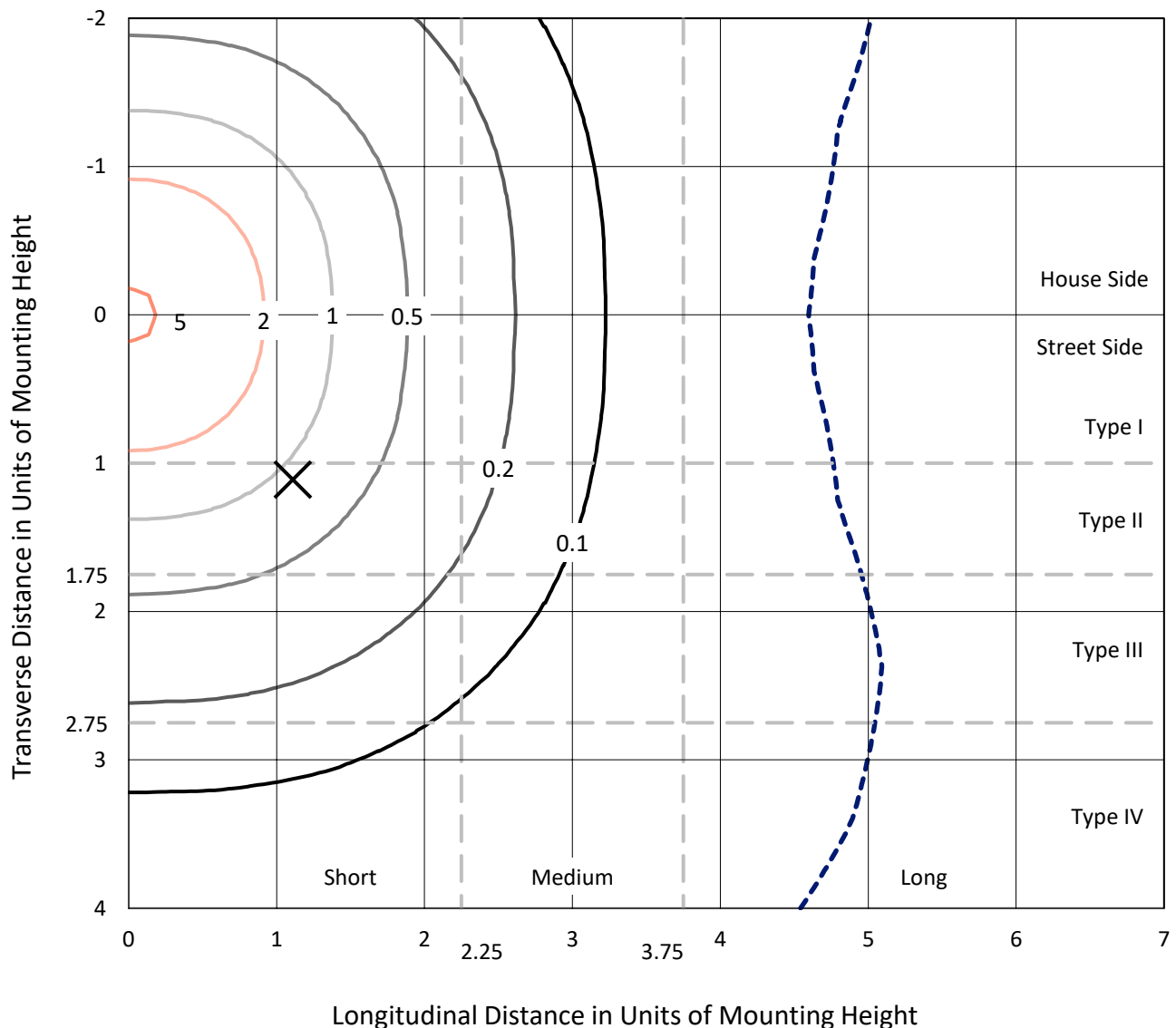
Lumens per Lamp: N/A
Luminaire Lumens: 6821.7 lumens
Efficiency: N/A
Efficacy: 148.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B3 - U4 - G2

Input Watts (W): 46
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

REPORT NUMBER: P821151
 CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

Iso-Footcandle Lines of Horizontal Illumination

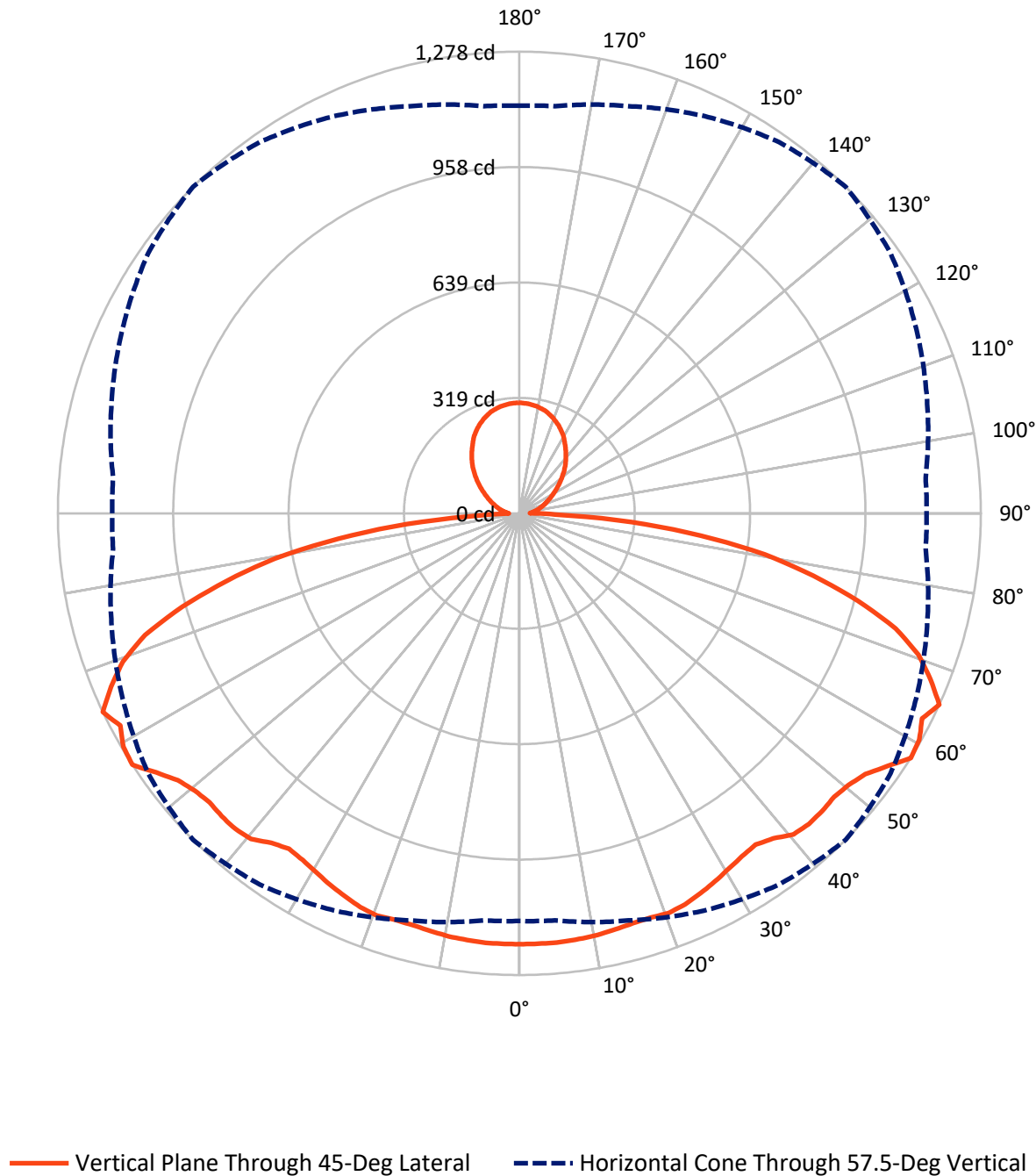
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.3 fc
 Type V - Short - N/A

REPORT NUMBER: P821151
CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P821151

CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

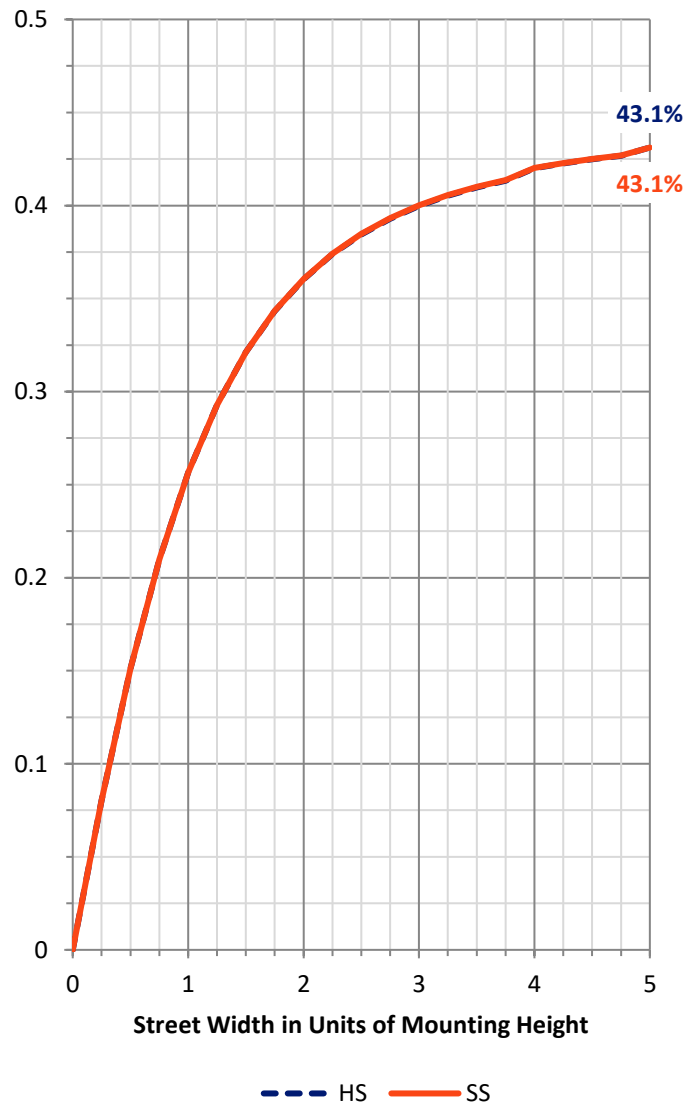
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2995.0	415.9	3410.9
	% Fixture	43.9	6.1	50.0
Street Side	Lumens	2995.0	415.9	3410.9
	% Fixture	43.9	6.1	50.0
Total	Lumens	5990.0	831.7	6821.7
	% Fixture	87.8	12.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	1.7
10°-20°	334.2	4.9
20°-30°	536.9	7.9
30°-40°	708.9	10.4
40°-50°	886.9	13.0
50°-60°	1054.8	15.5
60°-70°	1144.1	16.8
70°-80°	910.6	13.3
80°-90°	300.0	4.4
90°-100°	42.6	0.6
100°-110°	66.0	1.0
110°-120°	91.9	1.3
120°-130°	119.0	1.7
130°-140°	138.7	2.0
140°-150°	140.5	2.1
150°-160°	121.9	1.8
160°-170°	82.2	1.2
170°-180°	28.9	0.4
0°-90°	5990.0	87.8
0°-180°	6821.7	100.0

Coefficient of Utilization



REPORT NUMBER: P821151

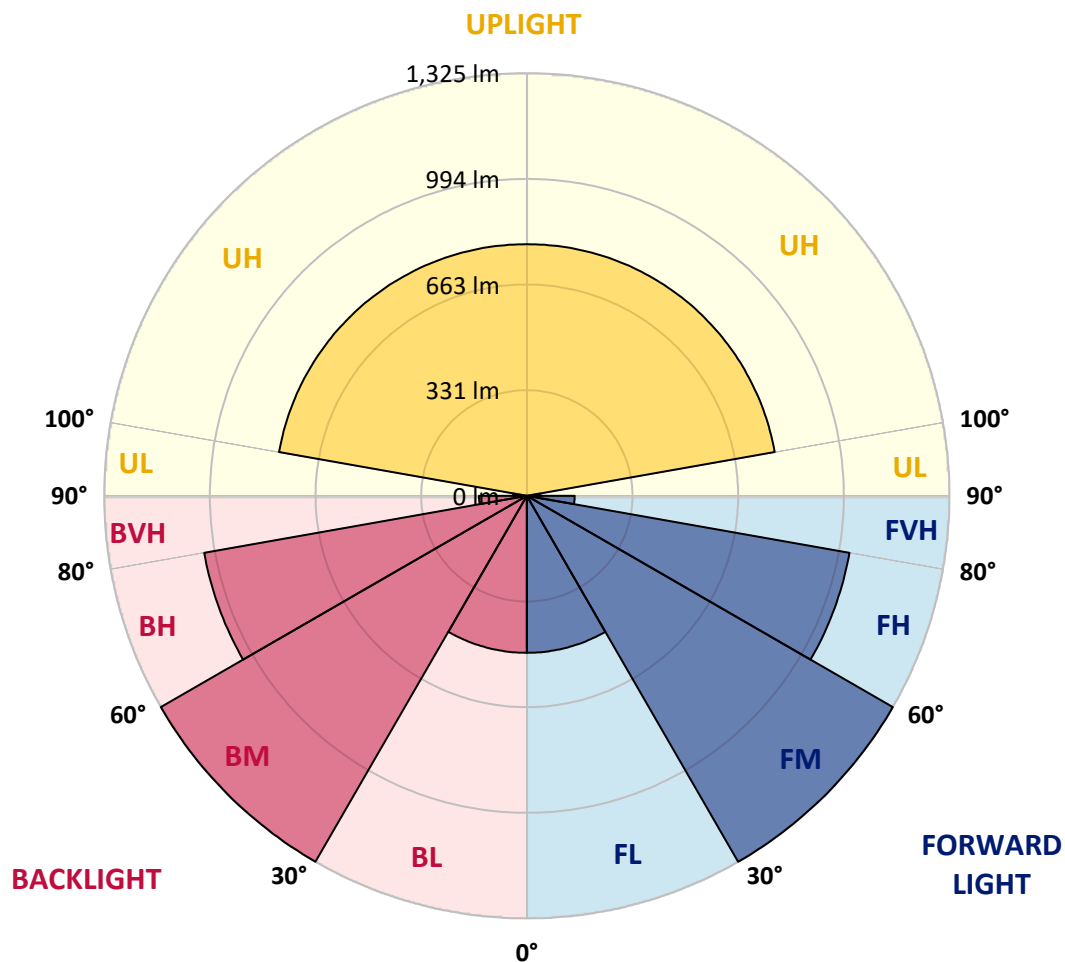
CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	492.4	7.2			
FM	(30°-60°)	1325.3	19.4			
FH	(60°-80°)	1027.4	15.1			G1/1800
FVH	(80°-90°)	150.0	2.2			G2/225
BL	(0°-30°)	492.4	7.2	B1/500		
BM	(30°-60°)	1325.3	19.4	B2/2500		
BH	(60°-80°)	1027.4	15.1	B3/2500		G1/1800
BVH	(80°-90°)	150.0	2.2			G2/225
UL	(90°-100°)	42.6	0.6		U2/50	
UH	(100°-180°)	789.1	11.6		U4/1000	

BUG Rating: B3-U4-G2

Type V Short





REPORT NUMBER: P821151

CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2
2.5°	1194.0	1193.1	1194.0	1193.1	1193.1	1192.2	1193.1	1193.1	1193.1	1193.1	1193.1
5°	1193.1	1192.2	1192.2	1193.1	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2	1192.2
7.5°	1189.6	1189.6	1190.4	1189.6	1189.6	1189.6	1189.6	1189.6	1189.6	1190.4	1190.4
10°	1186.9	1186.0	1186.9	1186.9	1186.0	1186.9	1186.0	1186.9	1186.9	1186.9	1186.9
12.5°	1183.3	1182.4	1183.3	1183.3	1182.4	1181.5	1182.4	1182.4	1183.3	1183.3	1183.3
15°	1177.1	1177.1	1178.9	1178.0	1178.0	1177.1	1178.9	1178.0	1177.1	1178.0	1178.0
17.5°	1172.6	1172.6	1174.4	1176.2	1176.2	1176.2	1176.2	1175.3	1173.5	1174.4	1172.6
20°	1173.5	1174.4	1175.3	1178.0	1179.8	1180.7	1180.7	1178.0	1175.3	1176.2	1175.3
22.5°	1170.9	1170.0	1170.9	1172.6	1175.3	1175.3	1175.3	1171.7	1170.9	1170.0	1170.0
25°	1160.2	1160.2	1162.0	1163.7	1165.5	1164.6	1165.5	1163.7	1162.0	1160.2	1160.2
27.5°	1147.7	1147.7	1150.4	1152.2	1153.9	1153.9	1153.0	1151.3	1150.4	1148.6	1147.7
30°	1135.2	1135.2	1137.9	1139.7	1142.4	1141.5	1141.5	1138.8	1136.1	1134.4	1134.4
32.5°	1121.9	1121.0	1123.7	1128.1	1131.7	1131.7	1131.7	1126.3	1122.8	1121.0	1120.1
35°	1110.3	1110.3	1113.9	1121.9	1126.3	1126.3	1124.6	1121.0	1113.0	1110.3	1110.3
37.5°	1106.7	1109.4	1119.2	1130.8	1139.7	1141.5	1138.8	1129.0	1118.3	1110.3	1107.6
40°	1118.3	1121.0	1133.5	1152.2	1165.5	1168.2	1165.5	1151.3	1132.6	1120.1	1119.2
42.5°	1120.1	1121.9	1137.0	1158.4	1170.9	1175.3	1170.9	1156.6	1136.1	1121.0	1120.1
45°	1113.9	1114.8	1132.6	1154.8	1170.0	1175.3	1170.0	1153.0	1131.7	1114.8	1113.9
47.5°	1105.9	1107.6	1127.2	1150.4	1169.1	1172.6	1168.2	1149.5	1125.4	1108.5	1105.9
50°	1099.6	1105.0	1122.8	1148.6	1170.9	1181.5	1170.9	1145.9	1121.9	1103.2	1099.6
52.5°	1103.2	1105.0	1128.1	1164.6	1194.9	1199.3	1194.0	1164.6	1126.3	1105.0	1102.3
55°	1113.9	1121.9	1146.8	1199.3	1227.0	1235.0	1223.4	1197.6	1147.7	1121.9	1113.9
57.5°	1128.1	1130.8	1166.4	1212.7	1253.7	1277.7	1254.6	1211.8	1169.1	1129.0	1127.2
60°	1116.5	1108.5	1153.0	1207.4	1262.6	1272.4	1259.0	1208.3	1151.3	1107.6	1115.7
62.5°	1085.4	1090.7	1127.2	1202.0	1240.3	1251.0	1236.7	1202.0	1125.4	1095.2	1082.7
65°	1060.4	1092.5	1132.6	1186.0	1247.4	1277.7	1248.3	1184.2	1134.4	1087.2	1057.8
67.5°	1025.7	1032.0	1091.6	1157.5	1212.7	1227.8	1211.8	1158.4	1086.3	1027.5	1032.0
70°	967.0	958.1	1018.6	1095.2	1147.7	1171.7	1149.5	1091.6	1015.9	956.3	964.3
72.5°	869.9	875.2	931.3	1012.4	1066.7	1089.8	1067.6	1006.1	929.6	880.6	875.2
75°	768.4	774.6	828.9	902.9	958.1	967.8	961.6	898.4	830.7	773.7	768.4
77.5°	652.7	658.9	703.4	784.4	817.4	832.5	819.2	788.9	701.6	658.0	650.9
80°	524.4	522.7	561.8	631.3	672.2	689.2	672.2	633.1	560.1	526.2	514.6
82.5°	374.9	376.6	413.1	461.2	500.4	505.7	497.7	465.7	409.6	381.1	365.1
85°	208.4	216.4	243.1	278.7	304.5	313.4	300.1	269.8	242.2	219.9	212.8
87.5°	49.9	54.3	63.2	80.1	89.9	98.8	89.9	83.7	59.7	54.3	49.9
90°	30.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.1
92.5°	34.8	34.2	34.2	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
95°	39.4	39.4	39.4	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
97.5°	44.6	44.6	44.6	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
100°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
102.5°	55.9	55.9	55.9	55.9	55.9	55.9	55.9	56.4	55.9	55.9	55.9
105°	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.9	62.0	62.0	62.0
107.5°	68.6	68.6	69.0	69.0	69.0	69.0	69.0	69.5	69.0	69.0	69.0
110°	75.1	75.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1

REPORT NUMBER: P821151

CATALOG NUMBER: TT-D3-830-24VDC-MQ-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	83.1	83.1	84.0	84.0	84.0	84.0	84.6	84.6	84.0	84.0	84.0
115°	91.1	91.1	92.0	92.0	92.0	92.0	93.0	93.0	92.0	92.0	92.0
117.5°	100.5	100.5	101.0	101.4	101.4	101.4	102.4	102.4	101.4	101.4	101.4
120°	109.9	109.9	109.9	110.8	110.8	110.8	111.8	111.8	110.8	110.8	110.8
122.5°	120.7	120.7	121.2	121.6	121.6	121.6	122.6	122.6	122.1	122.1	121.6
125°	131.5	131.5	132.4	132.4	132.4	132.4	133.4	133.4	133.4	133.4	132.4
127.5°	143.2	143.2	144.2	144.2	144.2	144.2	145.1	145.1	145.1	145.1	144.2
130°	155.0	155.0	155.9	155.9	155.9	155.9	156.8	156.8	156.8	156.8	155.9
132.5°	167.2	167.2	167.6	167.6	167.6	168.1	168.6	168.6	168.6	168.6	168.1
135°	179.4	179.4	179.4	179.4	179.4	180.3	180.3	180.3	180.3	180.3	180.3
137.5°	191.2	190.6	191.2	190.6	191.2	191.6	191.6	191.6	191.6	191.6	191.6
140°	202.9	201.9	202.9	201.9	202.9	202.9	202.9	202.9	202.9	202.9	202.9
142.5°	213.7	213.2	213.7	212.7	213.7	213.7	213.7	213.7	213.7	213.7	213.7
145°	224.5	224.5	224.5	223.5	224.5	224.5	224.5	224.5	224.5	224.5	224.5
147.5°	235.8	235.3	235.8	234.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8
150°	247.0	246.1	247.0	246.1	247.0	247.0	247.0	247.0	247.0	247.0	247.0
152.5°	256.0	255.5	256.4	255.5	256.0	256.0	256.4	256.0	256.0	256.0	256.0
155°	264.9	264.9	265.8	264.9	264.9	264.9	265.8	264.9	264.9	264.9	264.9
157.5°	272.4	272.4	273.3	272.4	272.4	272.4	273.3	272.4	272.4	272.4	272.4
160°	279.9	279.9	280.8	279.9	279.9	279.9	280.8	279.9	279.9	279.9	279.9
162.5°	286.0	286.0	286.9	286.0	286.0	286.0	286.9	286.0	286.0	286.0	286.0
165°	292.1	292.1	293.0	292.1	292.1	292.1	293.0	292.1	292.1	292.1	292.1
167.5°	295.8	295.8	296.8	295.8	295.8	295.8	296.8	295.8	295.8	295.8	295.8
170°	299.6	299.6	300.5	299.6	299.6	299.6	300.5	299.6	299.6	299.6	299.6
172.5°	302.0	302.0	302.8	302.0	302.4	302.0	302.8	302.0	302.0	302.0	302.0
175°	304.3	304.3	305.2	304.3	305.2	304.3	305.2	304.3	304.3	304.3	304.3
177.5°	305.2	305.2	305.7	305.2	305.7	305.2	305.7	305.2	305.2	305.2	305.2
180°	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2	306.2

(END OF REPORT)